STREAMFLOW CHARACTERISTICS OF THE GREEN, BEAR,
AND SNAKE RIVER BASINS, WYOMING, THROUGH 1984
By David A. Peterson

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 87-4022

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CONVERSION FACTORS

The following factors may be used to convert the inch-pound units used in this report to metric (International System) units:

Multiply inch-pound unit	В у	To obtain metric unit
acre	0.4047	hectometer
acre-foot	1,233	cubic meter
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
square mile (mi ²)	2.590	square kilometer

<u>Sea level</u>: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Mean Sea Level of 1929."

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By David A. Peterson

ABSTRACT

Knowledge of current streamflow characteristics is beneficial in evaluating and planning Wyoming's existing and future uses of surface water. This report presents a summary of streamflow characteristics for 101 streamflow-gaging stations in the Green, Bear, and Snake River Basins of western Wyoming and adjacent areas. Streamflow characteristics before and after dam construction are presented for five stations.

The streamflow characteristics presented include mean monthly and mean annual streamflow, duration of daily mean flow, and magnitude and probability of instantaneous annual peak flow, annual low flow, and annual high flow. Recurrence intervals of 2, 5, 10, 20 or 25, 50, and 100 years are determined for the peak-flow, low-flow, and high-flow characteristics. Annual low-flow and high-flow characteristics are also listed for various numbers of consecutive days. Mean monthly streamflow and duration of daily mean flow are graphed for each station.

INTRODUCTION

Planning for the use and development of Wyoming's surface-water resources is aided through a statistical summary of streamflows within the state. Knowledge of streamflow characteristics is beneficial for design and operation of reservoirs and to better manage supplies for recreation, irrigation, domestic, industrial, and municipal uses. A detailed compilation of the streamflow characteristics of Wyoming's surface-water resources in the Green, Bear, and Snake River Basins is provided in this report. The compilation is based on data collected at streamflow-gaging stations operated by the U.S. Geological Survey, in cooperation with municipal, State, and other Federal agencies. A report similar to this one has been compiled for 204 streamflow-gaging stations in the Missouri River Basin, Wyoming, and adjacent areas (Peterson, in press).

The purpose of this report is to present a statistical description of streamflow characteristics at gaging stations located in the Green, Bear, and Snake River Basins of Wyoming and adjacent areas. Streamflow data analyses are presented for 101 stations with 10 or more complete years of record. Twenty stations that are located in states adjacent to Wyoming are included because the stations gage streamflow entering or leaving Wyoming. The statistical summaries include maximum, minimum, and mean monthly streamflow; mean annual streamflow; duration of daily mean flow, and magnitude and probability

of instantaneous peak flow, annual low flow, and annual high flow, presented in a tabular format. Mean monthly streamflow and duration of daily mean streamflow are also presented graphically. Streamflow characteristics at five stations are presented for the periods before and after dam construction.

STREAMFLOW DATA ANALYSIS

Streamflow data were analyzed through computer programs of the Geological Survey. Monthly and annual streamflow characteristics were computed using program W4422 by Price and Meeks (1977). Peak-flow characteristics were computed using program J407 by Kirby (1981) and retrieved from the streamflow/basin characteristics file using program E796 by Dempster (1983). Low-flow, high-flow, and flow-duration characteristics were computed using program A969 by Meeks (1977). Output from programs W4422, E796, and A969 was formatted for publication using a FORTRAN program written in the Montana District (G.D. Rogers, U.S. Geological Survey, written commun., 1985).

Daily streamflow data summarized in this report are stored in the computer files of the U.S. Geological Survey and can be retrieved upon request. The data are also published in an annual series of reports; for example, see U.S. Geological Survey (1985).

The location of the streamflow-gaging stations and their identification numbers are shown in figure 1. Eight-digit station-identification numbers customarily are assigned to locations where samples or measurements are made on a repetitive basis. The first two digits indicate the river basin in which the station is located; for example, 09 refers to the Green River Basin. The remaining six digits are based on position in the river basin, and the numbers increase in the downstream direction.

The data are presented on facing pages for each station. On the left page is a station description including information on its location and period of record. Also on the left page are tables of the streamflow characteristics. On the right page, one graph shows mean monthly streamflow and a second graph shows duration of daily mean streamflow (flow-duration curve).

Station Description

The station manuscript contains detailed information about the station location, drainage area, period of record, type and history of gage, remarks on regulation or diversion, extremes for the period of record, and cooperation in data collection, if any. The period of record at stations active as of the end of water year 1984 (September 30, 1984) is noted "to current year." Throughout this report, "year" refers to the water year of October 1 to September 30 unless otherwise specified.

Streamflow Tables and Graphs

The period of record for analysis is listed in each table; the corresponding graphs use the same period of record. The period of record listed in

the table occasionally differs from that listed in the station description because the tables were screened to exclude large changes in the streamflow regime (such as construction of dams), seasonal data, or incomplete water years. When the length of record is sufficient, data are presented separately for the periods before and after construction of dams.

Monthly and annual streamflow characteristics presented in the tables include maximum, minimum, mean, standard deviation, coefficient of variation, and percent of annual runoff (by month).

Magnitude and probability of instantaneous peak flows are listed at stations where the natural flow is not substantially affected by regulation, diversion, or irrigation. Peak flows with recurrence intervals of 2, 5, 10, 25, 50, and 100 years and weighted skew were computed following methodology described by the Interagency Advisory Committee on Water Data (1981). The exceedance probabilities corresponding to recurrence intervals of 2, 5, 10, 25, 50, and 100 years are 50, 20, 10, 4, 2, and 1 percent; the probabilities are also listed in the tables. As an example, in any specified year, there is a 1-percent chance of exceedance of a peak flow with a recurrence interval of 100 years.

Magnitudes of annual low flows are given at recurrence intervals of 2, 5, 10, 20, 50, and 100 years for each of the following numbers of consecutive days: 1, 3, 7, 14, 30, 60, 90, 120, and 183. The non-exceedance probabilities corresponding to the above recurrence intervals are also listed.

The low-flow and high-flow frequency curves generally were projected to recurrence intervals of twice the length of record, but the 100-year recurrence interval flows are reported for stations having 40 or more years of record. Annual low flows are based on the climatic year which begins on April 1. Low-flow characteristics are interpreted as follows: the 7-day low flow will be less than the 7-day, 10-year low flow at intervals averaging 10 years in length; or, the probability is 10 percent that the 7-day low flow in any one year will be less than the 7-day, 10-year low flow. Riggs (1972) describes low-flow statistics in more detail.

Magnitude and probability of annual high flows are listed for series of 1, 3, 7, 15, 30, 60, and 90 consecutive days, with recurrence intervals of 2, 5, 10, 25, 50, and 100 years. As an example of interpretation, the annual 7-day high flow will exceed the 7-day, 10-year high flow at intervals averaging 10 years in length.

The final table for each station shows the probability distribution of the daily mean flows for all complete years of record. These figures are plotted on the facing page as the flow-duration curve. As a guideline, a steep flow-duration curve indicates highly variable flow, whereas a gently sloped curve indicates more uniform flow. The flow-duration curve of a perennial stream tends to be relatively flat at its lower end, indicating a stable base flow, whereas an intermittent or ephemeral stream has a steeply sloped curve at the lower end, indicating that base flow goes to zero. The shape of the flow-duration curve may be affected by irrigation or reservoir operations.

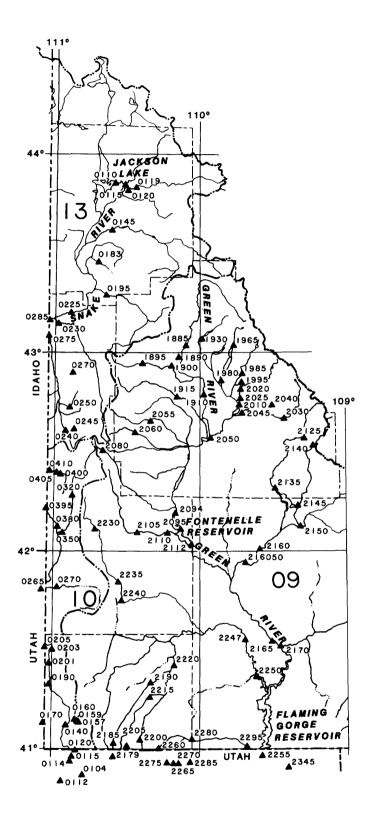
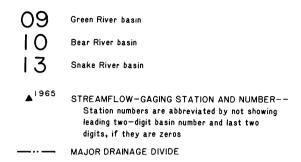


Figure 1.--Location of streamflow-gaging stations with 10 or more years of record in the Green, Bear, and Snake River Basins, Wyoming, and adjacent areas.

EXPLANATION

MAJOR DRAINAGE BASIN





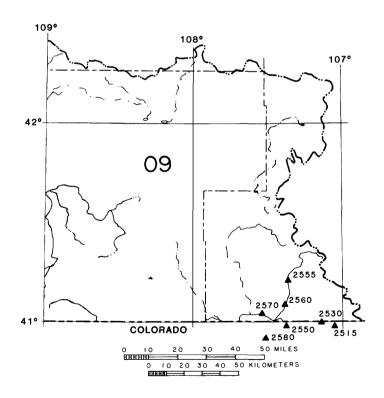


Figure 1.--Location of streamflow-gaging stations with 10 or more years of record in the Green, Bear, and Snake River Basins, Wyoming, and adjacent areas--Continued.

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- Dempster, G.R., Jr., 1983, Streamflow/basin characteristics retrieval (Program E796), v. 4, chap. II, sec. B, WATSTORE user's guide: U.S. Geological Survey Open-File Report 75-426, p. B-1 to B-31.
- Interagency Advisory Committee on Water Data, 1981, Guidelines for determining flood flow frequency (2d ed., revised) [editorial corrections made March 1982]: Reston, Va., U.S. Geological Survey Office of Water Data Coordination, Hydrology Subcommittee Bulletin 17B, 180 p.
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- Peterson, D.A., in press, Streamflow characteristics of the Missouri River Basin, Wyoming, through 1984: U.S. Geological Survey Water-Resources Investigations Report 87-4018.
- Price, W.E., Jr., and Meeks, W.C., 1977, Daily values monthly and annual statistics (Program W4422), v. 1, chap. IV, sec. F, WATSTORE user's guide: U.S. Geological Survey Open-File Report 75-426, p. F-1 to F-46.
- Riggs, H.C. 1972, Low-flow investigations: U.S. Geological Survey Techniques of Water-Resources Investigations, bk. 4, chap. Bl, 18 p.
- U.S. Geological Survey, 1985, Water resources data, Wyoming, Water year 1984: U.S. Geological Survey Water-Data Report WY-84-1, 470 p. [Reports for other years have similar titles.]

LIST OF STREAMFLOW-GAGING STATIONS

(*, characteristics shown before and after dam construction)

Station		D
number	Station name	Page
	GREEN RIVER BASIN	
09188500	Green River at Warren Bridge, near Daniel, Wyo	- 12
09189000	Beaver Creek near Daniel, Wyo	- 14
09189500	Horse Creek at Sherman ranger station, Wyo	
09190000	Horse Creek near Daniel, Wyo	- 18
09191000	Green River near Daniel, Wyo	- 20
09191500	Cottonwood Creek near Daniel, Wyo	- 22
09193000	New Fork River below New Fork Lakes, near Cora, Wyo	- 24
09196500	Pine Creek above Fremont Lake Wyo	
09198000	Pine Creek above Fremont Lake, WyoPine Creek at Pinedale, Wyo	- 28
09198500	Pole Creek below Little Half Moon Lake, near Pinedale, Wyo	. 30
09199500	Fall Creek near Pinedale, Wyo	- 32
09201000	New Fork River near Boulder, Wyo	- 34
09202000	Boulder Creek below Boulder Lake, near Boulder, Wyo	- 36
09202500	Roulder Creek near Roulder Wyo	- 38
09203000	East Fork River near Big Sandy, Wyo	- 40
09204000	Silver Creek near Rig Sandy Wyo	- 42
09204500	Silver Creek near Big Sandy, Wyo East Fork at Newfork, Wyo	- 44
09205000	New Fork River near Big Piney, Wyo	- 46
09205500	North Piney Creek near Mason, Wyo.	- 48
09206000	Middle Piney Creek below South Fork, near Big Piney, Wyo	
09208000	La Barge Creek near La Barge Meadows ranger station, Wyo	
09209400	Green River near La Barge Wyo	- 54
09209500	Green River near Fontenelle, Wyo	- 56
09210500	Fontenelle Creek near Herschler Ranch, near Fontenelle, Wy	58
09211000	Fontenelle Creek near Fontenelle, Wyo	
09211200	Green River below Fontenelle Reservoir, Wyo	
09212500	Big Sandy River at Leckie Ranch, near Big Sandy, Wyo	
09213500	Rio Sandy River near Farson Wyo	- 66
09214000	Little Sandy Creek near Elkhorn, Wyo	- 68
09214500	Little Sandy Creek above Eden, Wyo	- 70
09215000	Pacific Creek near Farson, Wyo	- 72
09216000	Big Sandy River below Eden, Wyo	- 74
09216050	Big Sandy River at Gasson Bridge, near Eden, Wyo	- 76
09216500	Green River at Green River, Wyo	- 78
09217000*	Green River near Green River, Wyo. (before construction of	
	Fontenelle Dam)	- 80
09217000*	Green River near Green River, Wyo. (after construction of	
	Fontenelle Dam)	- 82
09217900	Blacks Fork near Robertson, Wyo	84
09218500*	Blacks Fork near Millburne, Wyo. (before construction of	
	Meeks Cabin Dam)	- 86
09218500*	Blacks Fork near Millburne, Wyo. (after construction of	
	Meeks Cabin Dam)	- 88
09219000	Blacks Fork near Urie, Wyo	- 90
09220000	East Fork of Smiths Fork near Robertson, Wyo	- 92

LIST OF STREAMFLOW-GAGING STATIONS--CONTINUED

Station	Object the second	D
number	Station name	Page
	GREEN RIVER BASINcontinued	
09220500	West Fork of Smiths Fork near Robertson, Wyo	- 94
09221500	Smiths Fork at Mountainview, Wyo.	- 96
09222000*	Blacks Fork near Lyman, Wyo. (before construction of	,,,
0,222000	Meeks Cabin Dam)	- 98
09222000*	Blacks Fork near Lyman, Wyo. (after construction of	,,,
0,11100	Meeks Cabin Dam)	- 100
09223000	Hams Fork below Pole Creek, near Frontier, Wyo	
09223500*	Hams Fork near Frontier, Wyo. (before construction of	
	Viva Naughton Dam)	- 104
09223500*	Hams Fork near Frontier, Wyo. (after construction of	
	Viva Naughton Dam)	- 106
09224000	Hams Fork at Diamondville, Wyo	- 108
09224700	Blacks Fork near Little America, Wyo	- 110
09225000	Blacks Fork near Green River, Wyo	- 112
09225500	Green River near Linwood, Utah	- 114
09226000	Henrys Fork near Lonetree, Wyo	- 116
09226500	Middle Fork Beaver Creek near Lonetree, Wyo	- 118
09227000	East Fork Beaver Creek near Lonetree, Wyo	- 120
09227500	West Fork Beaver Creek near Lonetree, Wyo	- 122
09228000	Henrys Fork near Burntfork, Wyo	- 124
09228500	Burnt Fork near Burntfork, Wyo	- 126
09229500	Henrys Fork near Manila, Utah	- 128
09234500*	Green River near Greendale, Utah (before construction of	
		- 130
09234500*	Green River near Greendale, Utah (after construction of	
	Flaming Gorge Dam)	
09251500	Middle Fork Little Snake River near Battle Creek, Colo	- 134
09253000	Little Snake River near Slater, Colo	- 136
09255000	Slater Fork near Slater, Colo	- 138
09255500	Savery Creek at upper station, near Savery, Wyo	- 140
09256000	Savery Creek near Savery, Wyo	- 142
09257000	Little Snake River near Dixon, Wyo	- 144
09258000	Willow Creek near Dixon, Wyo.	• 146
	DEAD DIVER DAGIN	
10010/00	BEAR RIVER BASIN	1/0
10010400	East Fork Bear River near Evanston, Wyo	
10011200	West Fork Bear River at Whitney Dam, near Oakley, Utah	
10011400	West Fork Bear River below Deer Creek near Evanston, Wyo	157
10011500	Bear River near Utah-Wyoming State line	154
10012000	Mill Creek at Utah-Wyoming State line	. 150
10014000	Bear River above Sulphur Creek, near Evanston, Wyo	. 130
10015700	Sulphur Creek above reservoir, near Evanston, Wyo	160
10015900	Sulphur Creek below reservoir, near Evanston, Wyo	102
10016000	Sulphur Creek near Evanston, WyoYellow Creek near Evanston, Wyo	104 144
10017000	Deer Divers near Evensten Mys.	- 160 - 100
10019000	Bear River near Evanston, Wyo	100 170
10020100 10020300	Bear River below reservoir, near Woodruff, Utah	- 170 - 170
10020300	Dear River Delow reservoir, Hear Woodruil, Utan	- 112

LIST OF STREAMFLOW-GAGING STATIONS--CONTINUED

Station		
number	Station name	Page
	BEAR RIVER BASINcontinued	
10020500	Bear River near Woodruff, Utah	- 174
10026500	Bear River near Randolph, Utah	- 176
10027000	Twin Creek at Sage, Wyo	- 178
10032000	Smiths Fork near Border, Wyo	- 180
10035000	Smiths Fork at Cokeville, Wyo	- 182
10038000	Bear River below Smiths Fork, near Cokeville, Wyo	- 184
10039500	Bear River at Border, Wyo	- 186
10039300	Thomas Fork near Geneva, Idaho	- 188
10040500	Salt Creek near Geneva, Idaho	- 100 - 100
10040300	Thomas Fork near Wyoming-Idaho State line	- 102
10041000	Thomas Fork hear wyoming-rdano Scate Tine	- 192
	SNAKE RIVER BASIN	
13011000	Snake River near Moran, Wyo	- 194
13011500	Pacific Creek at Moran, Wyo	- 196
13011900	Buffalo Fork above Lava Creek near Moran, Wyo	- 198
13012000	Buffalo Fork near Moran, Wyo	- 200
13014500	Gros Ventre River at Kelly, Wyo	- 202
13018300	Cache Creek near Jackson, Wyo	- 204
13019500	Hoback River near Jackson, Wyo	- 206
13022500	Snake River above reservoir, near Alpine, Wyo	
13023000	Greys River above reservoir, near Alpine, Wyo	- 210
13024000	Salt River near Smoot, Wyo	- 212
13024500	Cottonwood Creek near Smoot, Wyo	- 214
13025000	Swift Creek near Afton, Wyo	- 216
13027000	Strawberry Creek near Bedford, Wyo	- 218
13027500	Salt River above reservoir, near Etna, Wyo	- 220
13028500	Salt River at Wyoming-Idaho State line	- 222

STREAMFLOW CHARACTERISTICS

[Altitude and datum, in feet, refer to distance above National Geodetic Vertical Datum of 1929. Abbreviations: ft, foot; ft³/s, cubic foot per second; mi, mile; mi², square mile; %, percent; sec., section; ½, quarter-section; T., township; R., range; °, degree of latitude or longitude; ', minute of latitude or longitude; ", second of latitude or longitude; ---, value not calculated]

09188500 GREEN RIVER AT WARREN BRIDGE, NEAR DANIEL, WYO.

LOCATION.--Lat 43°01'08", long 110°07'03", in SE\SE\NE\S ec.8, T.35 N., R.111 W., Sublette County, on right bank 100 ft upstream from bridge on U.S. Highways 189 and 191, 3.4 mi upstream from Beaver Creek, and 12 mi north of Daniel.

DRAINAGE AREA.--468 mi².

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,468.09 ft. Prior to October 6, 1977, on left bank at same datum.

REMARKS.--Diversions above station for irrigation of about 10,200 acres, of which about 6,100 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,840 ft³/s, June 9, 1972, gage height, 5.77 ft; minimum recorded, 31 ft³/s, November 26, 1933, gage height, 0.70 ft, from rating curve extended below 120 ft³/s.

Monthly and annual streamflow 1932-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	433	110	201	65	0.32	3.3
November	223	89	144	32	0.22	2.3
December	182	70	122	24	0.19	2.0
January	176	50	109	24	0.22	1.8
February	166	60	109	20	0.18	1.8
March	240	70	120	27	0.23	2.0
April	600	129	279	108	0.39	4.6
May	1810	269	1040	352	0.34	17.0
June	3160	610	1810	516	0.29	29.6
July	2420	463	1310	476	0.36	21.5
August	997	252	563	184	0.33	9.2
September	592	162	307	93	0.30	5.0
Annual	690	281	511	104	0.20	100

Magnitude and probability of instantaneous peak flow based on 53 years of record

			e probabi	lity, in p	percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
00	3570	3980	4460	4800	5130

Weighted skew = -0.041

Magnitude and probability of annual low flow based on period of record 1933-84

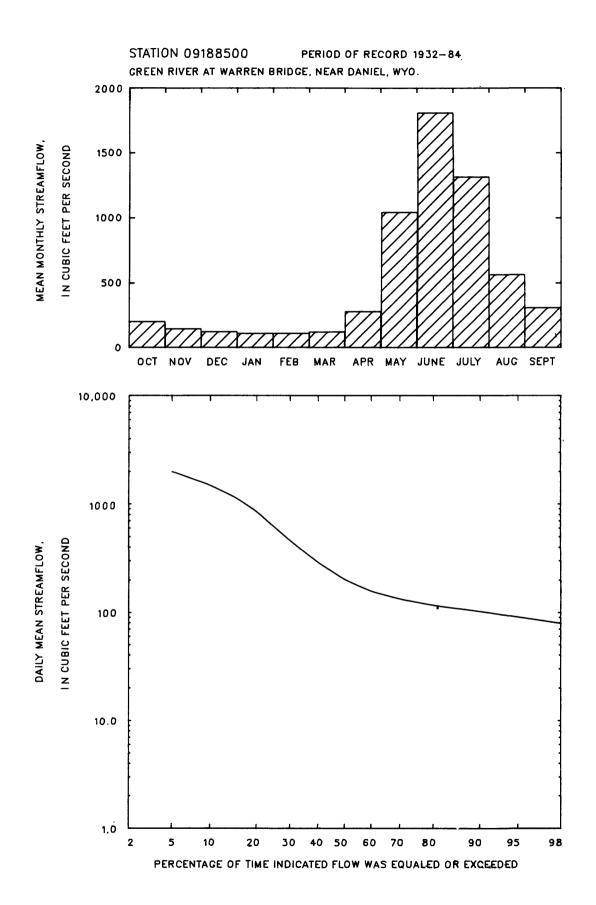
Period (con- secu-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent									
tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%				
1	84	68	59	52	45	40				
3	87	71	63	56	48	43				
7	92	75	66	59	51	46				
14	95	79	71	64	58	53				
30	99	84	76	70	63	58				
60	104	89	81	74	67	62				
90	108	93	85	78	71	67				
120	113	98	90	83	76	71				
183	132	114	106	100	94	90				

Magnitude and probability of annual high flow based on period of record 1932-84

Period (con-		recurren	c e inter	³ /s, for val, in bility,	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2880	3550	3900	4270	4500	4700
3	2790	3440	3790	4170	4400	4610
7	2550	3200	3580	4000	4290	4550
15	2260	2860	3220	3630	3920	4190
30	1990	2460	2730	3020	3210	3380
60	1700	2060	2250	2430	2530	2620
90	1440	1740	1890	2030	2120	2190

Duration of daily mean flow for period of record 1932-84

	Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2930	1990	1480	1130	851	461	289	201	156	132	116	101	90	78	71	66	51



09189000 BEAVER CREEK NEAR DANIEL, WYO.

LOCATION.--Lat 43°00'20", long. 110° 08'30", in sec.18, T.35 N., R.111 W., Sublette County, on left bank at Hanson Ranch, 0.5 mi downstream from forks, 1 mi upstream from mouth, 2 mi southwest of Warren Bridge, and 11 mi northwest of Daniel.

DRAINAGE AREA. -- 141 mi2.

PERIOD OF RECORD. -- October 1938 to September 1954. Monthly discharge only for some periods; published in WSP 1313. GAGE. -- Water-stage recorder. Altitude of gage is 7,440 ft, from topographic map.

REMARKS.--Diversions for irrigation of about 10,700 acres (part of which is above and part below station) adjudicated by Wyoming for diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,540 ft³/s May 16, 1950, gage height, 8.34 ft, from rating curve extended above 1,060 ft³/s; no flow at times in most years.

Monthly and annual streamflow 1939-54

Magnitude and probability of annual low flow based on period of record 1940-54

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	30	0.25	8.9	8.9	0.99	2.2
November	26	4.5	13	6.4	0.50	3.2
December	25	4.0	11	5.9	0.53	2.7
January	23	3.0	10	5.4	0.53	2.5
February	25	3.2	10	5.5	0.54	2.6
March	41	5.0	14	9.3	0.65	3.6
April	258	9.0	116	64	0.56	28.9
May	470	11	139	124	0.89	34.8
June	198	0.26	63	59	0.94	15.8
July	42	0.00	6.4	13	2.0	1.6
August	40	0.00	4.2	9.9	2.3	1.0
September	18	0.19	4.4	5.5	1.3	1.1
Annua l	78	11	33	21	0.62	100

Period (con-		recurren	e, in ft ³ ce inter dance pro	val, in y	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100
1	0.00	0.00	0.00			
3	0.00	0.00	0.00			
7	0.00	0.00	0.00			
14	0.00	0.00	0.00			
30	0.12	0.00	0.00			
60	0.50	0.05	0.00			
90	1.3	0.38	0.20			
120	2.2	0.65	0.33			
183	5.5	2.3	1.3			

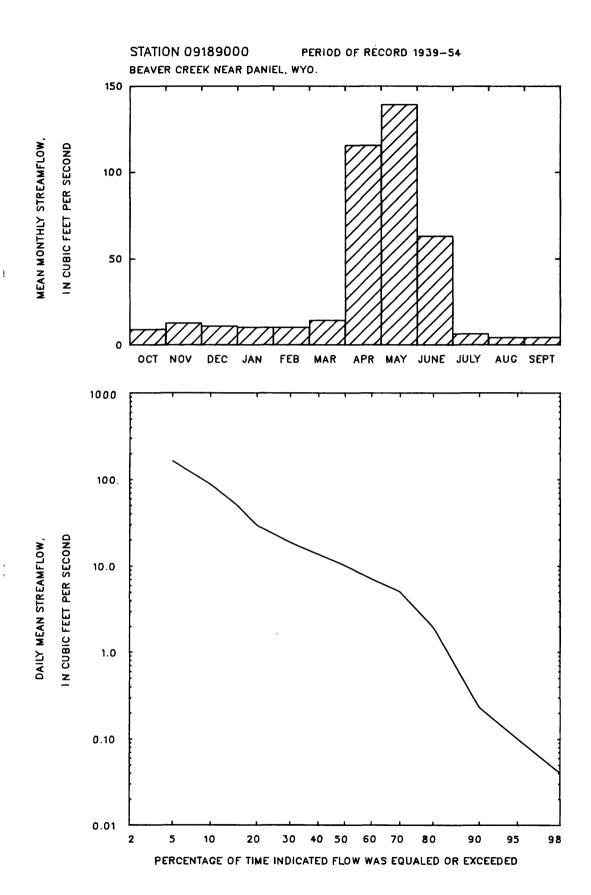
Magnitude and probability of instantaneous peak flow based on --- years of record

		/s, for in			e interval percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1939-54

Period (con-		recurre	ice inter	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	345	610	811			
3	307	549	737			
7	260	477	652			
15	208	391	544			
30	160	290	395			
60	117	205	277			
90	89	156	211			

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or ind	icated	percent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
418	164	88	51	29	18	13	10	7.0	5.0	2.0	0.23	0.10	0.04	0.02	0.01	0.00



09189500 HORSE CREEK AT SHERMAN RANGER STATION, WYO.

LOCATION.--Lat 42°56'40", long. 110°23'20", in SW3 sec.6, T.34 N., R.113 W., Sublette County, Bridger National Forest, on left bank 0.5 mi east of Sherman ranger station, 0.8 mi downstream from Spring Creek, 5.5 mi upstream from South Horse Creek, and 17 mi west of Daniel.

DRAINAGE AREA. -- 43.0 mi².

PERIOD OF RECORD. -- October 1954 to September 1974.

GAGE. -- Water-stage recorder. Datum of gage is 7,770 ft.

REMARKS. -- Diversion for irrigation of about 360 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft³/s June 1, 1956; maximum gage height, 7.88 ft June 15, 1974; minimum daily discharge, 1.4 ft³/s August 11, 14, 15, 19, 1957.

Monthly and annual streamflow 1955-74

Magnitude and probability of annual low flow based on period of record 1956-74

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft3/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-	:	recurren	ce inter	³ /s, for val, in y	years, a	nd
		(10 /3)					tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	15	3.1	7.7	3.6	0.47	0.9							
November	15	3.1	6.4	2.7	0.43	0.8							
December	9.1	2.5	5.3	1.7	0.33	0.6	1	3.0	2.3	1.9	1.6		
January	8.6	2.5	4.7	1.7	0.36	0.6	3	3.2	2.4	2.0	1.7		
February	8.2	2.9	4.8	1.5	0.32	0.6	7	3.4	2.5	2.1	1.8		
March	12	2.8	5.6	1.9	0.34	0.7	14	3.7	2.7	2.3	1.9		
April	78	5.9	22	18	0.81	2.6	30	4.0	3.1	2.7	2.3		
May	491	108	274	99	0.36	32.8	60	4.2	3.3	2.9	2.6		
June	809	141	420	197	0.47	50.2	90	4.5	3.5	3.1	2.8		
July	164	13	65	46	0.70	7.8	120	4.8	3.8	3.3	3.0		
August	26	3.5	12	6.2	0.53	1.4	183	5.5	4.2	3.7	3.4		
September	17	3.9	8.4	3.8	0.45	1.0							
Annual	117	41	70	22	0.31	100							

Magnitude and probability of instantaneous peak flow based on 20 years of record

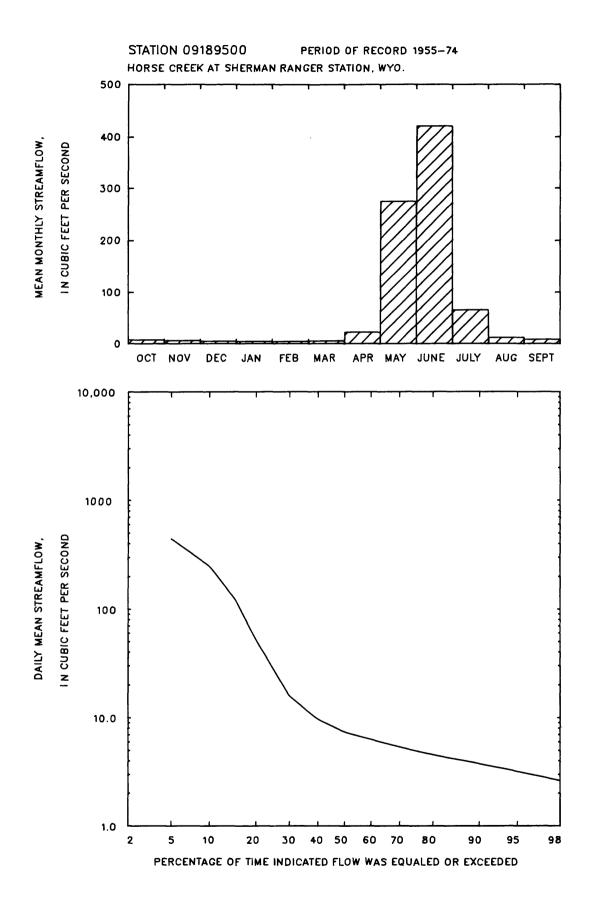
2 5	10	25	50	100
20%	10%	4%	2%	1%

Weighted skew = 0.160

Magnitude and probability of annual high flow based on period of record 1955-74

Period (con-			e, in ft ce inter ce proba	val, in	years, a	and
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	785	1010	1170	1370		
3	734	939	1080	1260		
7	666	856	984	1150		
15	579	763	889	1050		
30	485	638	742	876		
60	339	443	514	604		
90	244	322	375	443		

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
807	442	249	123	52	16	9.6	7.3	6.3	5.3	4.5	3.7	3.2	2.6	2.3	2.2	1.6



09190000 HORSE CREEK NEAR DANIEL, WYO.

LOCATION.--Lat 42°55'42", long 110°11'52", in SW%NE%SE% sec.10, T.34 N., R.112 W., Sublette County, on left bank 7.0 mi northwest of Daniel.

DRAINAGE AREA .-- 106 mi2.

PERIOD OF RECORD. -- October 1931 to September 1954, October 1982 to current year. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,348.60 ft. Prior to November 30, 1948, at site 350 ft downstream at datum 1.82 ft higher. December 1, 1948, to September 30, 1954, at present site at datum 1.55 ft higher.

REMARKS. -- Diversion above station for irrigation of about 16,300 acres above and below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,670 ft³/s, May 31, 1936, gage height, 3.53 ft, site and datum then in use, from rating curve extended above 800 ft³/s; maximum gage height, 4.42 ft, May 29, 1951, datum then in use; minimum daily discharge, 1.0 ft³/s, July 22-23, 1940.

Monthly and annual streamflow 1932-54, 1983-84

Magnitude and probability of annual low flow based on period of record 1933-54, 1984

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	:	recurren	cé inter	³ /s, for val, in y	years, a	nd
		(10 / 0)	(10 / 10)	(10 / 0)			tive days)	2 50%	5 20%	10 10%	2 0 5 %	50 2%	100 1%
October	52	7.1	19	9.6	0.52	2.3							
November	44	7.7	17	7.9	0.48	2.1							
December	23	6.1	12	4.7	0.38	1.5	1	6.2	3.2	2.1	1.5		
January	2 2	6.0	11	4.6	0.40	1.4	3	6.4	3.3	2.2	1.6		
February	22	6.0	12	4.5	0.39	1.5	7	6.7	3.6	2.5	1.8		
March	25	8.0	15	4.6	0.30	1.9	14	7.6	4.3	3.1	2.3		
April	166	15	73	39	0.53	9.1	30	8.9	5.8	4.6	3.8		
May	708	74	249	147	0.59	30.9	60	9.7	6.8	5.7	4.9		
June	590	8.8	307	166	0.54	38.2	90	10	7.4	6.3	5.6		
July	196	2.9	49	54	1.1	6.1	120	11	8.3	7.2	6.4		
August	72	6.4	24	17	0.71	3.0	183	13	9.5	8.2	7.3		
September	37	7.8	17	7.7	0.47	2.1							
Annual	125	15	67	30	0.45	100							

Magnitude and probability of instantaneous peak flow

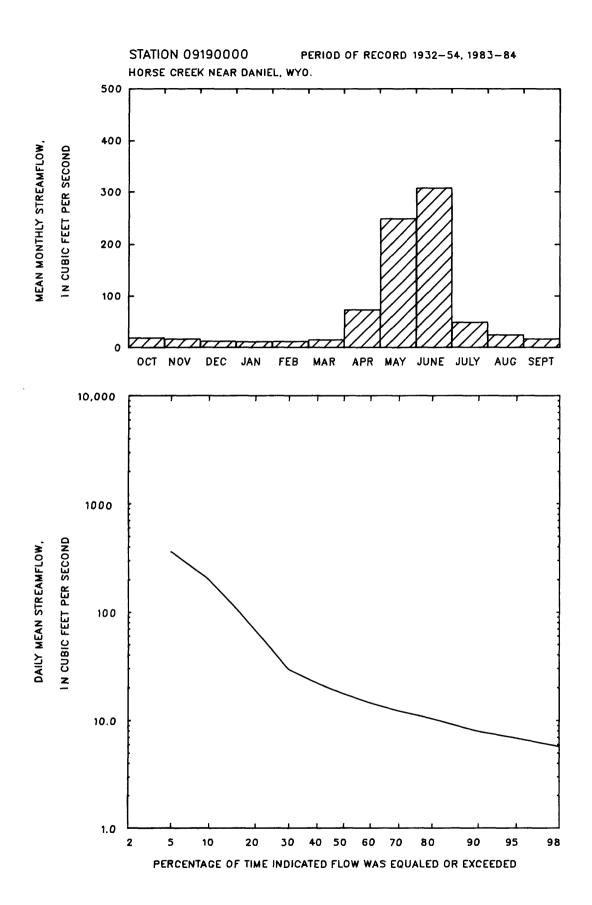
based on --- years of record

2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1932-54, 1983-84

Period (con-		recurre	ge, in ft nce inter nce proba	val, in	years,	and
secu- tive days)	2 50%	5 2 0%	10 10%	25 4%	50 2%	100 1%
1	650	899	1030	1160		
3	597	823	939	1050		
7	536	760	878	999		
15	454	651	757	868		
30	383	551	638	723		
60	281	414	480	541		
90	214	314	363	410		

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	2 0%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
693	360	201	112	68	29	22	17	14	12	10	7.8	6.8	5.7	4.1	2.7	1.6



09191000 GREEN RIVER NEAR DANIEL, WYO.

LOCATION.--Lat 42°47', long. 109°58', in sec.5, T. 32 N., R.110. W., Sublette County, at former highway bridge 6 mi southeast of Daniel.

DRAINAGE AREA. -- 932 mi2.

PERIOD OF RECORD.--October 1912 to December 1932.

GAGE.--Chain gage. Altitude of gage is 7,040 ft, from river-profile map.

REMARKS. -- Diversions above station for irrigation of about 60,000 acres above and below station. Natural regulation by lakes.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge 8,750 ft³/s June 16, 1918, gage height, 7.0 ft; minimum not determined, probably occurred during winter.

Monthly and annual streamflow 1913-32

Magnitude and probability of annual low flow based on period of record 1914-32

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	1	recurren	e, in ft ce interv dance pro	val, in y	years, a	nd
	(10 /8)		(11-75)	(11-75)	acion	Tullott	tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	531	167	310	80	0.26	3.7		· · · · · · · · · · · · · · · · · · ·					
November	299	116	231	45	0.19	2.8							
December	250	120	189	33	0.18	2.3	1	150	123	110	99		
January	210	96	158	30	0.19	1.9	3	152	124	110	9 9		
February	200	125	160	27	0.17	1.9	7	153	125	111	9 9		
March	650	170	250	106	0.43	3.0	14	153	126	112	101		
April	1290	301	662	280	0.42	8.0	30	153	128	115	104		
May	3010	439	1620	637	0.39	19.4	60	157	133	121	111		
June	4740	771	2210	1070	0.49	26.5	90	165	142	130	121		
July	2890	316	1430	600	0.42	17.2	120	175	151	140	131		
August	1050	361	699	214	0.31	8.4	183	214	185	170	158		
September	740	204	404	133	0.33	4.9							
Annual	1010	352	695	190	0.27	100							

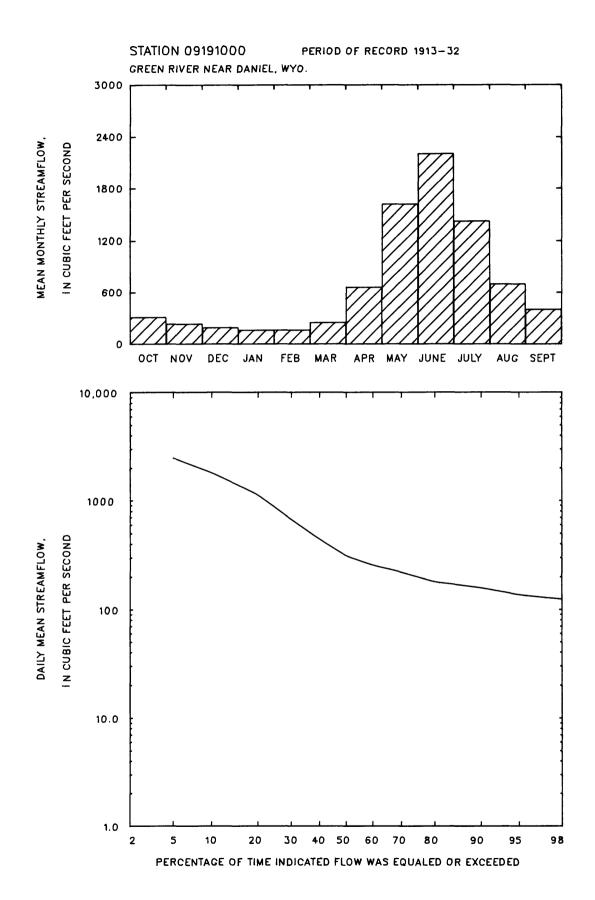
Magnitude and probability of instantaneous peak flow based on --- years of record

2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1913-32

Period (con-			ce inter	³ /s, for val, in bility,	years, a	and
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	3420	4980	6010	7290		
3	3290	4820	5820	7070		
7	3070	4520	5460	6610		
15	2710	3990	4830	5870		
30	2340	3390	4050	4850		
60	2010	2780	3200	3660		
90	1770	2400	2730	3060		

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
4080	2480	1810	1400	1130	669	441	310	255	220	179	157	136	124	121	99	92



09191500 COTTONWOOD CREEK NEAR DANIEL, WYO.

LOCATION.--Lat 42°46'30", long 110°09'10", in sec.11, T.32 N., R.112 W., Sublette County, on right bank 1.5 mi downstream from confluence of North and South Cottonwood Creeks and 7 mi southwest of Daniel.

DRAINAGE AREA. -- 202 mi2.

PERIOD OF RECORD.--October 1938 to September 1954. Monthly discharge only for some periods; published in WSP 1313. GAGE.--Altitude of gage is 7,210 ft, from topographic map.

REMARKS.--Diversions for irrigation of about 18,000 acres (part of which is above and part below station) adjudicated by Wyoming for diversion above station.

EXTREMES FOR PERIOD OF RECORD.--maximum discharge, 954 ft³/s May 30, 1951; maximum gage height, 6.75 ft June 19, 1946, no flow August 19-22, 1940.

Monthly and annual streamflow 1939-54

Magnitude and probability of annual low flow based on period of record 1940-54

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	cient of vari-	Percent of annual runoff	Period (con-		Discharg recurren	ce inter	val, in y	ears, a	nd
			(10 /0)	(10 / 0)			tive days)	2 5 0%	5 2 0%	10 1 0%	20 5%	50 2 %	100 1%
October	56	11	28	14	0.50	3.4							
November	44	12	25	8.9	0.36	3.0							
December	30	3.8	17	7.0	0.42	2.0	1	8.9	4.6	0.0	0.0		
January	32	4.2	15	7.2	0.50	1.7	3	9.4	5.0	0.0	0.0		
February	35	5.4	15	7.6	0.51	1.8	7	10	5.2	1.4	0.42		
March	35	9.0	23	7.6	0.34	2.7	14	12	5.3	2.4	1.1		
April	364	25	118	85	0.72	14.1	30	12	5.4	3.0	1.7		
May	466	42	198	124	0.62	23.7	60	12	6.2	4.1	2.8		
June	571	34	231	142	0.61	27.7	90	13	7.8	5.7	4.3		
July	322	10	103	94	0.92	12.3	120	15	9.4	7.3	5.9		
August	103	1.3	41	31	0.76	4.9	183	18	12	9.2	7.6		
September	51	4.4	22	14	0.62	2.7							
Annua1	173	19	70	40	0.58	100							

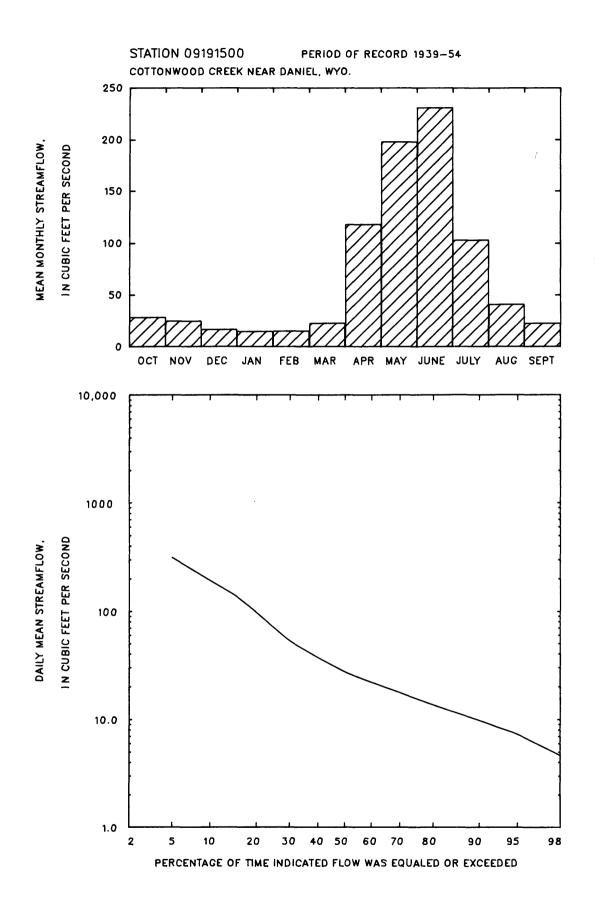
Magnitude and probability of instantaneous peak flow based on --- years of record

2	5	10	25	50	100
0%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1939-54

Period (con-		recurre	ncé inte	t ³ /s, for rval, in sbility,	years, a	and
secu- tive days)	2 50%	5 20 %	10 10%	25 4%	50 2 %	100 1%
1	380	570	6 9 0	833		
3	341	522	640	784		
7	293	467	591	756		
15	256	416	531	685		
30	228	368	464	588		
60	193	325	419	542		
90	167	281	365	479		

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of 1	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
508	312	193	139	98	52	36	27	22	18	14	9.8	7.3	4.6	3.8	1.7	0.13



09193000 NEW FORK RIVER BELOW NEW FORK LAKES, NEAR CORA, WYO.

LOCATION.--Lat 43°04'43", long 109°59'41", sec.21, T.36 N., R.110 W., Sublette County, on left bank 1.8 mi downstream from New Fork Lakes and 9.6 mi north of Cora.

DRAINAGE AREA. -- 36.2 mi2.

PERIOD OF RECORD. --October 1938 to October 1971, May to September 1972. Monthly discharge only for some periods; published in WSP 1313. Prior to October 1943, published as New Fork below New Fork Lake, near Cora, and October 1943 to September 1970, published as New Fork River below New Fork Lake, near Cora.

GAGE.--Water-stage recorder. Altitude of gage is 7,720 ft, from topographic map. Prior to September 16, 1949, at site 70 ft downstream at same datum.

REMARKS.--Flow regulated by New Fork Lakes 1.8 mi upstream (capacity, 20,300 acre-ft). No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 630 ft³/s June 10, 1972, gage height, 5.74 ft; maximum gage height recorded, 5.85 ft January 31, 1961 (backwater from ice); minimum daily discharge, 0.1 ft³/s May 13, 1941, September 20-22, 1950, when gates in dam at New Fork Lakes were closed.

Monthly and annual streamflow 1939-71

Magnitude and probability of annual low flow based on period of record 1940-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
0-4-1	76	1.6	22	20	0.00	2.7
October November	76 31	1.6 1.1	23 10	20 6.3	0.88 0.63	3.7 1.6
December	12	0.90	5.9	3.1	0.63	1.0
January	13	0.60	5.5	3.1	0.58	0.9
February	12	0.50	5.7	3.2	0.57	0.9
March	13	0.40	5.6	3.2	0.56	0.9
April	14	1.0	5.7	3.1	0.55	0.9
May	161	0.74	38	40	1.0	6.2
June	351	190	254	43	0.17	41.4
July	363	50	213	57	0.27	34.6
August	67	3.3	20	13	0.67	3.3
September	140	2.8	28	28	0.99	4.6
Annua l	73	32	51	9.0	0.18	100

eriod (con-	1	Discharge recurrenc on-exceed	e interv	al, in y	ears, an	ıd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	1.8	0.60	0.31	0.17	0.08	
3	1.8	0.64	0.33	0.19	0.09	
7	1.9	0.69	0.38	0.22	0.11	
14	2.1	0.84	0.49	0.30	0.17	
3 0	2.8	1.3	0.87	0.59	0.37	
60	4.0	1.9	1.2	0.77	0.45	
90	5.1	2.4	1.5	0.94	0.53	
120	5.3	2.7	1.7	1.2	0.71	
183	8.8	5.0	3.6	2.6	1.8	

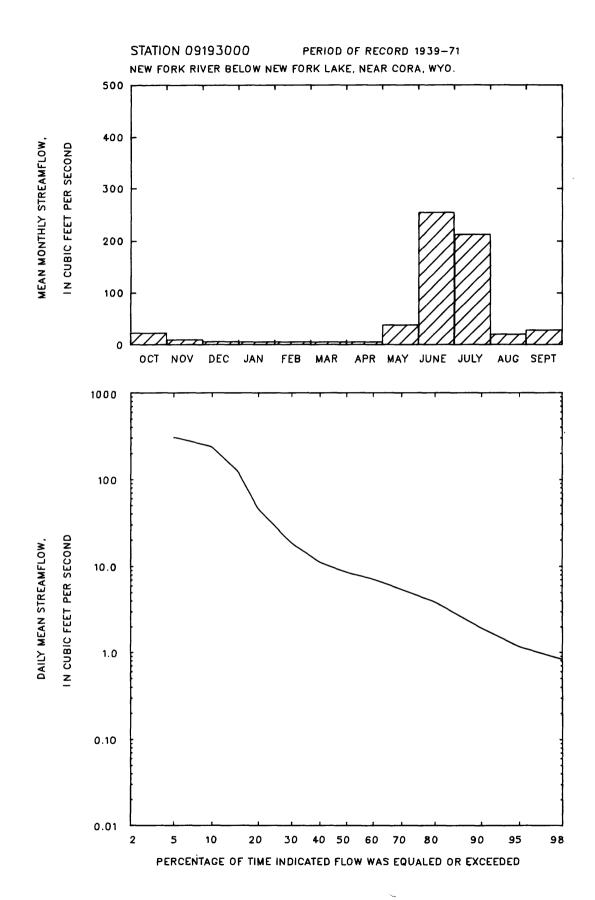
Magnitude and probability of instantaneous peak flow based on --- years of record

^	E	10	25	50	100
2 50%	20%	10%	25 4%	2%	100
30%	206	10%	46	26	1 /0

Magnitude and probability of annual high flow based on period of record 1939-71

Period (con-		recurre	ice inte	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	370	431	467	510	540	
3	363	422	458	502	533	
7	345	399	432	471	498	
15	324	371	397	427	447	
30	291	334	361	393	416	
60	246	278	296	316	329	
90	174	197	210	224	234	

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
403	304	236	125	45	18	11	8.5	7.1	5.4	3.8	1.9	1.2	0.82	0.48	0.36	0.19



09196500 PINE CREEK ABOVE FREMONT LAKE, WYO.

LOCATION.--Lat $43^{\circ}01'50"$, long $109^{\circ}46'10"$, in S_{2}^{1} sec.5, T.35 N., R.108 W., Sublette County, Bridger National Forest, on right bank 0.5 mi upstream from Fremont Lake, 0.5 mi downstream from Fremont Creek, and 12 mi northeast of Pinedale.

DRAINAGE AREA. -- 75.8 mi2.

PERIOD OF RECORD. -- October 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,540 ft, from topographic map.

REMARKS. -- No diversion above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 2,550 ft3/s, June 16, 1959, gage height, 7.15 ft; minimum daily, 3.3 ft³/s, April 4, 1977.

Monthly and annual streamflow 1955-84

Magnitude and probability of annual low flow based on period of record 1956-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		Discharge recurrenc on-exceed	é interv	al, in y	ears, an	ıd
		(10 / 0)	(10 /8)	(10 / 5)	- GCTON		tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	165	15	57	36	0.64	2.6							
November	72	11	32	16	0.51	1.5							
December	53	6.7	24	11	0.45	1.1	1	12	8.1	6.2	4.8	3.4	
January	38	4.4	20	8.5	0.42	0.9	3	12	8.3	6.4	4.9	3.5	
February	37	4.7	17	6.1	0.35	0.8	7	12	8.5	6.5	5.0	3.6	
March	30	4.0	16	4.8	0.29	0.8	14	13	9.0	7.1	5.7	4.3	
April	98	12	32	19	0.58	1.5	30	14	10	8.0	6.4	4.8	
May	579	90	269	122	0.45	12.5	60	16	11	8.7	6.9	5.2	
June	1280	533	859	196	0.23	39.9	90	18	12	9.5	7.5	5.6	
July	1140	141	565	284	0.50	26.3	120	20	14	11	8.4	6.2	
August	350	68	169	73	0.43	7.8	183	27	19	15	13	10	
September	209	36	92	44	0.47	4.3							
Annual	243	97	180	38	0.21	100							

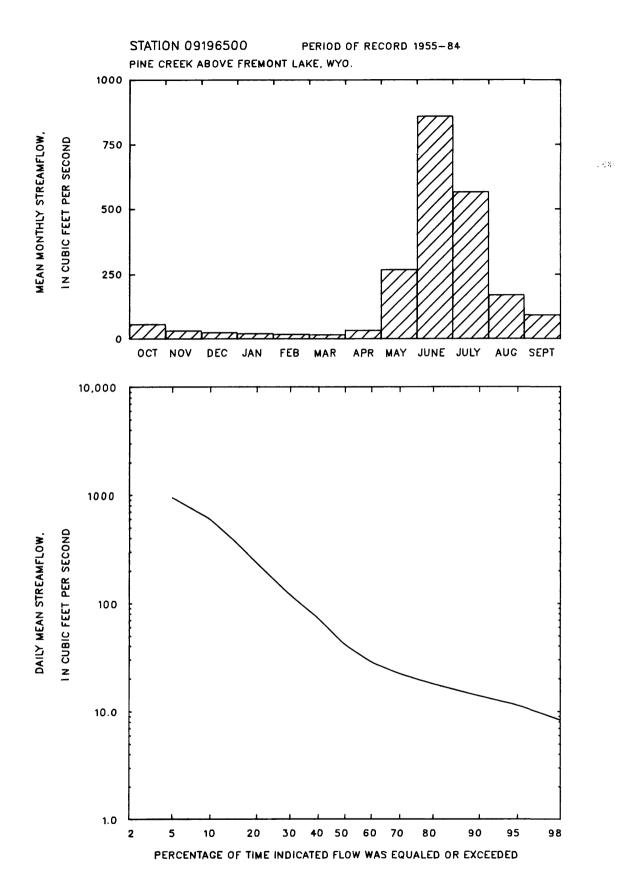
Magnitude and probability of instantaneous peak flow based on 30 years of record

	e, in ft ³ ars, and				
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1720	2030	2220	2440	2600	2750

Magnitude and probability of annual high flow based on period of record 1955-84

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100
1	1580	1850	2000	2180	2310	
3	1490	1720	1850	1990	2090	
7	1360	1600	1740	1890	1990	
15	1170	1420	1570	1730	1840	
30	994	1180	1280	1370	1430	
60	771	922	992	1060	1100	
90	598	712	765	814	841	

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1520	942	594	363	236	119	72	41	28	22	18	14	11	8.3	6.1	4.4	3.5



09198000 PINE CREEK AT PINEDALE, WYO.

LOCATION.--Lat 42°52', long 109°52', at north edge of sec.4, T.33 N., R.109 W., Sublette County, on left bank 30 ft downstream from bridge on U. S. Highway 187 at Pinedale and 3 mi upstream from mouth.

DRAINAGE AREA. -- 118 mi2.

PERIOD OF RECORD.--October 1903 to October 1904, October 1914 to September 1954. Monthly discharge only for some periods; published in WSP 1313. Published as "near Pinedale 1904".

GAGE.--Water-stage recorder. Datum of gage is 7,162.34 ft. Prior to August 17, 1917, staff gages at sites within a 0.25 mi downstream at different datums. August 17, 1917, to May 3, 1926, staff gage at highway bridge 30 ft upstream at different datum. May 4, 1926, to November 11, 1948, water-stage recorder at sites 20 to 50 ft upstream from highway bridge at datum 3.06 ft higher.

REMARKS.--Diversions above station for irrigation of about 6,000 acres, most of which is below station. Flow regulated by Fremont Lake (regulated capacity, 20,600 acre-ft of which 9,840 acre-ft is for power purposes and 10,760 acre-ft is for irrigation).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft³/s June 17, 18, 1918, gage height, 4.8 ft, site and datum then in use; minimum daily, 2 ft³/s April 1-26, May 2, 6-8, 1931.

Monthly and annual streamflow 1916-54

Magnitude and probability of annual low flow based on period of record 1917-54

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	e, in ft ³ ce interv dance pro	al, in y	ears, ar	ıd
	(10 , 1)	(20 / 0)	(20 / 10)	(10 / 0)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	92	4.9	35	26	0.74	2.2							
November	73	4.9	29	17	0.57	1.9							
December	53	5.0	28	12	0.42	1.7	1	11	6.2	4.3	3.2	2.2	
J anuary	48.	8.0	26	11	0.42	1.6	3	11	6.3	4.4	3.2	2.2	
February	47	7.0	25	9.7	0.38	1.6	7	12	6.6	4.6	3.4	2.3	
March	54	3.0	26	10	0.41	1.6	14	13	7.2	5.1	3.7	2.4	
April	92	2.1	32	17	0.53	2.0	30	14	8.2	5.7	4.1	2.7	
May	345	3.8	149	94	0.63	9.4	60	18	11	7.6	5.7	3.9	
June	1240	69	603	240	0.40	38.0	90	20	13	10	8.2	6.4	
July	1370	33	450	288	0.64	28.3	120	22	14	11	9.3	7.3	
August	319	25	133	83	0.63	8.3	183	26	18	14	12	9.4	
September	147	11	54	35	0.64	3.4							
Annual	218	35	133	44	0.33	100							

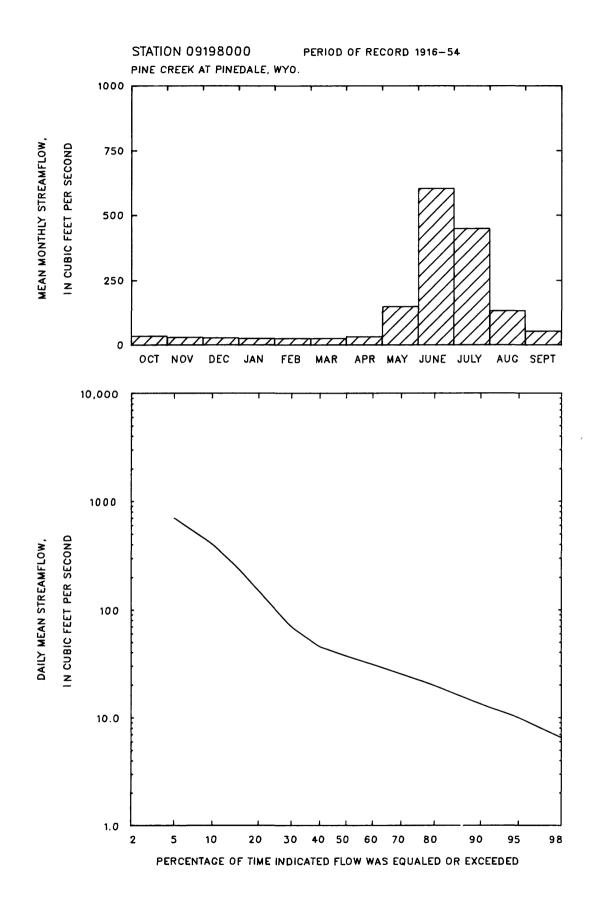
Magnitude and probability of instantaneous peak flow based on --- years of record

2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1916-54

Period (con-		recurren	e, in ft ce inter ce proba	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1100	1500	1740	2000	2180	
3	1070	1460	1690	1950	2130	
7	1000	1370	1590	1830	2000	
15	893	1230	1440	1670	1830	
30	760	1050	1200	1370	1470	
60	562	754	843	925	969	
90	429	575	642	702	735	

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1280	698	405	244	151	69	45	37	31	25	20	13	9.9	6.5	4.8	3.8	2.2



09198500 POLE CREEK BELOW LITTLE HALF MOON LAKE, NEAR PINEDALE, WYO.

LOCATION.--Lat 42°53', long 109°43', in sec.26, T.34 N., R.108 W., Sublette County, on left bank 1.5 mi downstream from Little Half Moon Lake and 7 mi east of Pinedale.

DRAINAGE AREA. -- 87.5 mi².

PERIOD OF RECORD.--October 1938 to September 1971. Monthly discharge only for some periods; published in WSP 1313. GAGE.--Water-stage recorder. Altitude of gage is 7,350 ft, by barometer. Prior to October 27, 1948, at site 0.2 mi upstream at different datum.

REMARKS.--Natural regulation by several lakes above station. Diversion for irrigation of about 100 acres above station. EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,300 ft³/s June 17, 1959, gage height, 6.74 ft; minimum daily, 2.0 ft³/s October 27, 1964.

Monthly and annual streamflow 1939-71

Magnitude and probability of annual low flow based on period of record 1940-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	n
						· · · · · · · · · · · · · · · · · · ·	tive days)	2 50%
October	63	2.9	26	19	0.75	2.0		
November	56	2.8	20	15	0.75	1.6		
December	48	4.0	18	10	0.57	1.3	1	7.5
January	40	3.0	17	9.0	0.52	1.3	3	7.6
February	39	3.0	17	9.1	0.53	1.3	7	7.8
March	35	5.0	16	6.6	0.41	1.2	14	8.1
April	96	10	33	21	0.64	2.5	30	8.7
May	485	95	260	108	0.41	19.9	60	9.6
June	859	251	540	153	0.28	41.3	90	11
July	584	5 5	262	140	0.54	20.0	120	13
August	176	9.0	71	44	0.62	5.4	183	17
September	90	5.4	29	21	0.73	2.2		
Annual	160	55	109	26	0.24	100		

Period (con-		recurren	cé inter	³ /s, for val, in y obability	ears, an	.d
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	7.5	4.3	3.2	2.5	1.9	
3	7.6	4.4	3.2	2.5	1.9	
7	7.8	4.4	3.3	2.6	1.9	
14	8.1	4.6	3.4	2.7	2.0	
30	8.7	5.0	3.7	2.8	2.1	
60	9.6	5.5	4.1	3.2	2.4	
90	11	6.6	5.0	3.9	3.0	
120	13	7.7	5.9	4.6	3.6	
183	17	10	7.5	5.8	4.2	

Magnitude and probability of instantaneous peak flow based on 33 years of record

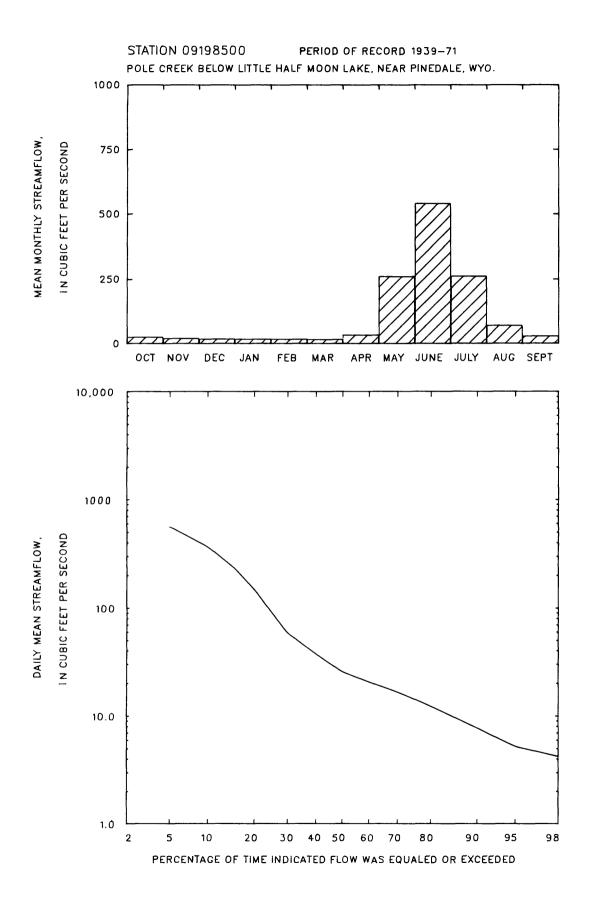
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Weighted skew = -0.456

Magnitude and probability of annual high flow based on period of record 1939-71

Period (con-			cé inter	3/s, for val, in bility,	years, a	nd
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	926	1120	1220	1330	1390	
3	895	1080	1180	1290	1360	
7	822	1010	1100	1210	1280	
15	705	873	969	1070	1150	
30	592	720	794	879	938	
60	462	560	614	675	716	
90	357	438	483	533	567	

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
925	558	367	238	149	59	37	25	21	17	12	7.7	5.2	4.2	3.4	3.1	2.2



09199500 FALL CREEK NEAR PINEDALE, WYO.

LOCATION.--Lat 42°51'21", long 109°43'12", in SW\xNW\xSW\x sec.2, T.33 N., R.108 W., Sublette County, on right bank at McBride Ranch, 0.5 mi downstream from Meadow Creek, 3 mi downstream from Burnt Lake, and 8 mi east of Pinedale.

DRAINAGE AREA.--37.2 mi².

PERIOD OF RECORD.--October 1938 to September 1971. Monthly discharge only for some periods; published in WSP 1313. GAGE.--Water-stage recorder. Altitude of gage is 7,240 ft, from topographic map. Prior to April 4, 1942, at datum 2.00 ft higher.

REMARKS. -- No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 707 ft³/s June 15, 1953, gage height, 8.56 ft; minimum daily, 0.1 ft³/s September 21, 1942, October 13-20, November 30, 1962, January 12-29, 1963, September 25, 1964.

Monthly and annual streamflow 1939-71

Magnitude and probability of annual low flow based on period of record 1940-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	r	recurren	ge, in ft ice interedance pro	val, in y	ears, an	ıd
					acton		tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	16	0.34	4.5	4.7	1.0	0.9							
November	18	0.40	4.4	4.9	1.1	0.9							
December	14	0.30	4.9	3.9	0.80	1.0	1	0.77	0.28	0.16	0.11	0.06	
January	12	0.17	5.1	3.4	0.67	1.1	3	0.84	0.33	0.21	0.14	0.09	
February	13	0.95	5.2	2.9	0.55	1.1	7	0.91	0.36	0.22	0.15	0.10	
March	9.8	1.6	5.2	1.8	0.35	1.1	14	1.0	0.40	0.25	0.17	0.11	
April	3 5	1.9	12	7.9	0.67	2.5	30	1.2	0.49	0.31	0.22	0.15	
May	222	30	114	50	0.44	23.7	60	1.4	0.59	0.38	0.26	0.17	
June	408	69	221	75	0.34	46.1	90	1.8	0.75	0.47	0.33	0.22	
July	217	16	83	51	0.62	17.2	120	2.3	0.95	0.60	0.40	0.26	
August	50	1.8	16	13	0.79	3.3	183	3.4	1.7	1.2	0.87	0.60	
September	25	0.25	5.1	4.8	0.93	1.1					· · · · · · · · · · · · · · · · · · ·		
Annual	65	16	40	11	0.28	100							

Magnitude and probability of instantaneous peak flow based on 33 years of record

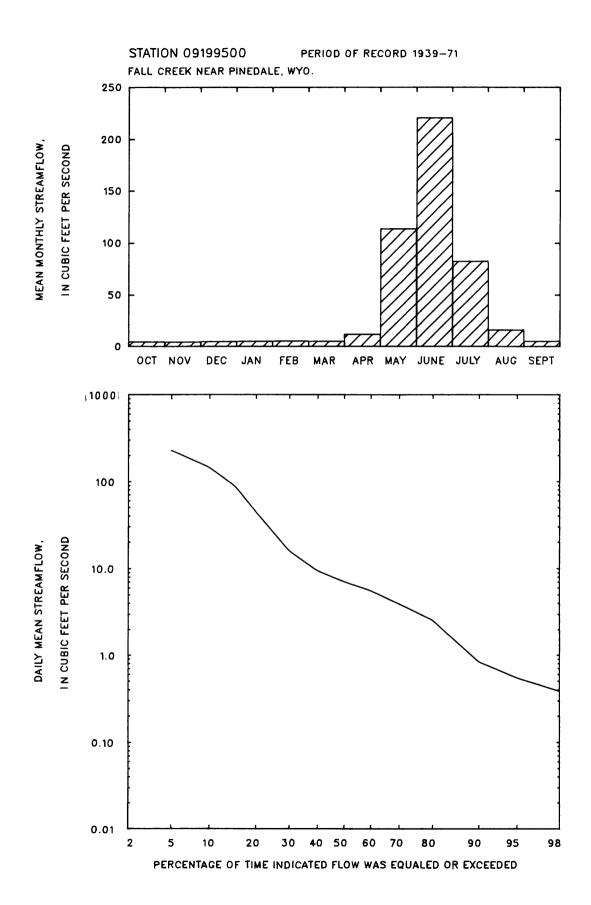
5 10 25 50 100
0% 10% 4% 2% 1%

Weighted skew = -0.514

Magnitude and probability of annual high flow based on period of record 1939-71

Period (con-		recurre	nce inter	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	398	507	568	634	677	
3	373	474	532	595	638	
7	332	428	486	554	602	
15	284	364	412	468	507	
30	241	301	336	378	406	
60	186	231	255	281	298	
90	139	175	196	218	233	

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or ind	icated p	percent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
380	226	144	87	44	16	9.3	7.0	5.5	3.9	2.5	0.83	0.54	0.38	0.32	0.27	0.11



09201000 NEW FORK RIVER NEAR BOULDER, WYO.

LOCATION.--Lat 42°45'01", long 109°43'41", in NW\LE\LNW\Lambda sec.16, T.32 N., R.108 W., Sublette County, on left bank 70 ft downstream from highway bridge, 700 ft upstream from Boulder Creek, and 0.5 mi northwest of Boulder.

DRAINAGE AREA. -- 552 mi2.

PERIOD OF RECORD.--October 1914 to September 1969. Prior to October 1943, published as New Fork near Boulder. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 6,900 ft, by barometer. Prior to September 7, 1936, non-recording gage at bridge 70 ft upstream at same datum.

REMARKS.--Flow partly regulated by Fremont, New Fork, and Willow Lakes (total capacity, 81,500 acre-ft) and Little Half Moon Lake. Diversions above station for irrigation of hay meadows above and below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft³/s June 17, 1918, gage height, 8.7 ft, from rating curve extended above 6,000 ft³/s; minimum daily, 38 ft³/s May 17, 1963.

Monthly and annual streamflow 1915-69

Magnitude and probability of annual low flow based on period of record 1916-69

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	e, in ft ³ ce interv dance pro	al, in y	ears, a	nd
	(10 / 0)	(10 / 5)	(10 /1)	(10 / 10)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	433	68	167	74	0.45	3.6							
November	350	74	148	53	0.36	3.1							
December	300	70	119	39	0.32	2.5	1	81	63	54	47	41	36
January	250	65	106	31	0.29	2.3	3	83	65	56	50	43	39
February	200	58	108	32	0.30	2.3	7	85	67	59	53	46	42
March	182	62	121	29	0.24	2.6	14	87	71	63	57	51	47
April	502	71	243	100	0.41	5.2	30	90	74	68	63	58	55
May	1280	132	578	271	0.47	12.3	60	95	79	73	68	63	61
June	4120	308	1580	645	0.41	33.7	90	99	8 3	77	72	68	65
July	2440	104	1010	555	0.55	21.5	120	105	88	81	76	71	69
August	790	78	337	177	0.52	7.2	183	120	97	88	82	76	72
September	480	73	175	84	0.48	3.7							***
Annual	611	153	392	112	0.28	100							

Magnitude and probability of instantaneous peak flow based on 55 years of record

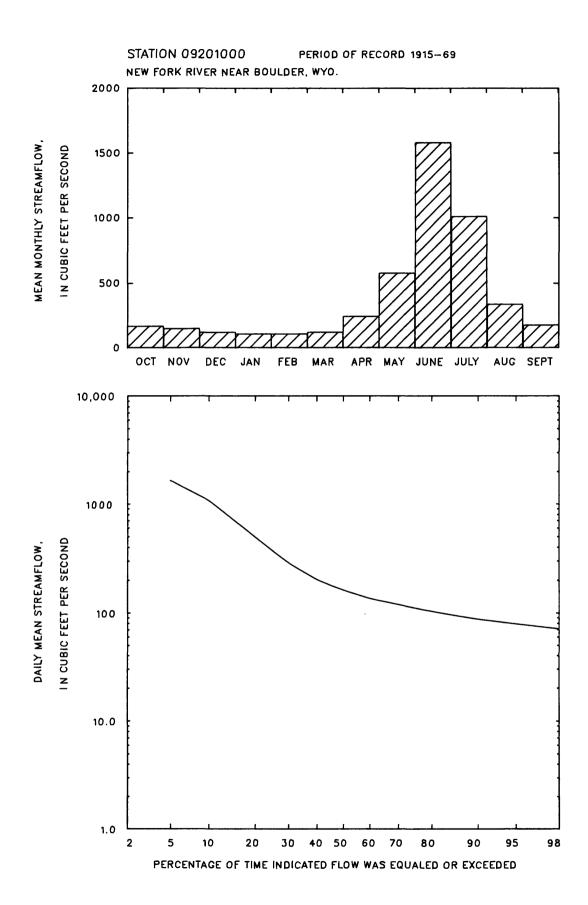
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Weighted skew = -0.147

Magnitude and probability of annual high flow based on period of record 1915-69

Period (con-		recurren	e, in ft ce inter ce proba	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2620	3840	4690	5780	6630	7480
3	2540	3670	4430	5390	6110	6820
7	2340	3330	3970	4770	5340	5910
15	2070	2890	3400	4000	4420	4820
30	1780	2420	2790	3200	3470	3710
60	1370	1820	2050	2280	2410	2520
90	1090	1440	1610	1770	1860	1940

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded	for indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2910	1640	1080	697	495	285	201	160	135	118	103	87	79	71	65	61	50



09202000 BOULDER CREEK BELOW BOULDER LAKE, NEAR BOULDER, WYO.

LOCATION.--Lat 42°49'10",long 109°42'59", in SW\NE\NW\x sec.23, T.33 N., R.108 W., Sublette County, on right bank 1.5 mi downstream from outlet of Boulder Lake and 5.0 mi north of Boulder.

DRAINAGE AREA. -- 130 mi2.

PERIOD OF RECORD.--October 1938 to October 1971, May 1972 to September 1973. Monthly discharge only for some periods; published in WSP 1313.

GAGE. -- Water-stage recorder. Altitude of gage is 7,180 ft, from topographic map.

REMARKS.--Flow regulated 1.5 mi upstream by Boulder Lake, capacity, about 22,300 acre-ft. One diversion above station for irrigation of about 700 acres below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,810 ft³/s June 15, 1953, gage height, 6.12 ft; no flow November 28, 1939, to April 15, 1940, November 18, 1944.

Monthly and annual streamflow 1940-71, 1973

Magnitude and probability of annual low flow based on period of record 1940-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	177	7.5	52	42	0.81	2.2
November	93	0.37	23	22	0.96	1.0
December	54	0.00	17	18	1.0	0.7
January	58	0.00	16	15	0.98	0.7
February	69	0.00	17	18	1.0	0.7
March	109	0.00	19	22	1.2	0.8
April	110	6.3	37	25	0.68	1.6
May	837	93	384	192	0.50	16.5
June	1490	356	1060	264	0.25	45.3
July	1000	145	468	235	0.50	20.0
August	383	25	153	73	0.48	6.6
September	213	13	89	52	0.58	3.8
Annual	287	93	195	45	0.23	100

Period (con-	1	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent											
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%							
1	3.0	0.18	0.00	0.00	0.00								
3	3.5	0.38	0.00	0.00	0.00								
7	3.9	0.51	0.00	0.00	0.00								
14	4.6	0.64	0.00	0.00	0.00								
30	5.5	1.4	0.46	0.00	0.00								
60	6.5	1.7	0.60	0.00	0.00								
90	7.3	2.1	0.68	0.00	0.00								
120	8.4	2.5	0.94	0.00	0.00								
183	18	8.1	5.2	3.6	2.3								

Magnitude and probability of instantaneous peak flow based on --- years of record

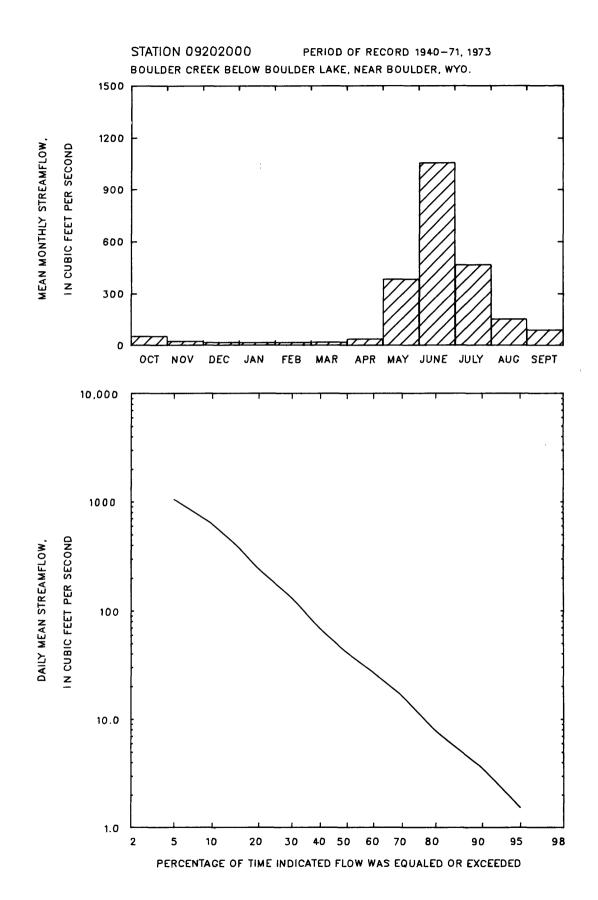
In ye	ars, and	exceedance	PIODADI	ircy, in	percenc
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1940-71, 1973

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1920	2250	2410	2570	2660	
3	1850	2160	2320	2490	2590	
7	1700	2000	2150	2320	2430	
15	1430	1710	1870	2040	2160	
30	1180	1390	1500	1620	1700	
60	866	1030	1110	1190	1240	
90	653	783	851	922	967	

Duration of daily mean flow for period of record 1940-71, 1973

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercent	age of	time	_ =	
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1870	1050	623	384	240	131	68	40	26	16	7.7	3.6	1.5	0.50	0.08	0.04	0.01



09202500 BOULDER CREEK NEAR BOULDER, WYO.

LOCATION.--Lat 42°47', long 109°43', in sec.4, T.32 N., R.108 W., Sublette County, 2 mi upstream from mouth and 2 mi northwest of Boulder.

DRAINAGE AREA. -- 112 mi2.

PERIOD OF RECORD.--October 1903 to October 1906, October 1914 to October 1924, October 1930 to December 1932. Published as "near New Fork," 1904.

GAGE.--Chain gage after May 19, 1920. Altitude of gage is 7,030 ft, by barometer. April 23, 1904, to April 30, 1906, staff gage 0.25 mi upstream at different datum. May 1 to October 31, 1906, staff gage 50 ft downstream at different datum. May 10, 1915, to May 18, 1920, staff gage 50 ft downstream at same datum.

REMARKS.--Adjudicated diversions above station for irrigation of about 8,800 acres lying both above and below station. Flow slightly regulated by Boulder Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,240 ft³/s June 14, 1918, gage height, 6.8 ft; minimum, 0.9 ft³/s August 31, 1915.

Monthly and annual streamflow 1904, 1915-24, 1931-32

Magnitude and probability of annual low flow based on period of record 1916-24, 1932

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Peri (co
							tiv day
October	101	3.1	25	26	1.0	1.3	
November	55	3.3	24	17	0.70	1.2	
December	35	8.0	22	9.5	0.43	1.1	:
January	35	8.0	22	8.7	0.39	1.1	3
February	35	8.0	23	9.2	0.41	1.1	7
March	40	7.0	24	9.1	0.38	1.2	14
April	78	7.0	38	22	0.59	1.9	30
May	594	57	316	171	0.54	16.0	60
June	1710	178	1060	517	0.49	54.0	90
July	1140	9.4	355	311	0.88	18.0	120
August	134	3.7	39	35	0.90	2.0	183
September	65	3.0	19	19	1.0	1.0	
Annua l	262	34	164	63	0.38	100	

Period (con-		Discharge recurrence on-exceed	é inter	val, in y	ears, a	nd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	3.8	1.7	1.0	0.67		
3	4.2	2.1	1.3	0.91		
7	5.2	3.5	2.8	2.3		
14	5.4	3.7	3.1	2.6		
30	6.4	4.2	3.3	2.7		
60	8.9	5.1	3.7	2.8		
90	13	6.7	4.7	3.5		
120	16	9.5	6.9	5.2		
183	20	12	9.3	7.4		

Magnitude and probability of instantaneous peak flow based on --- years of record

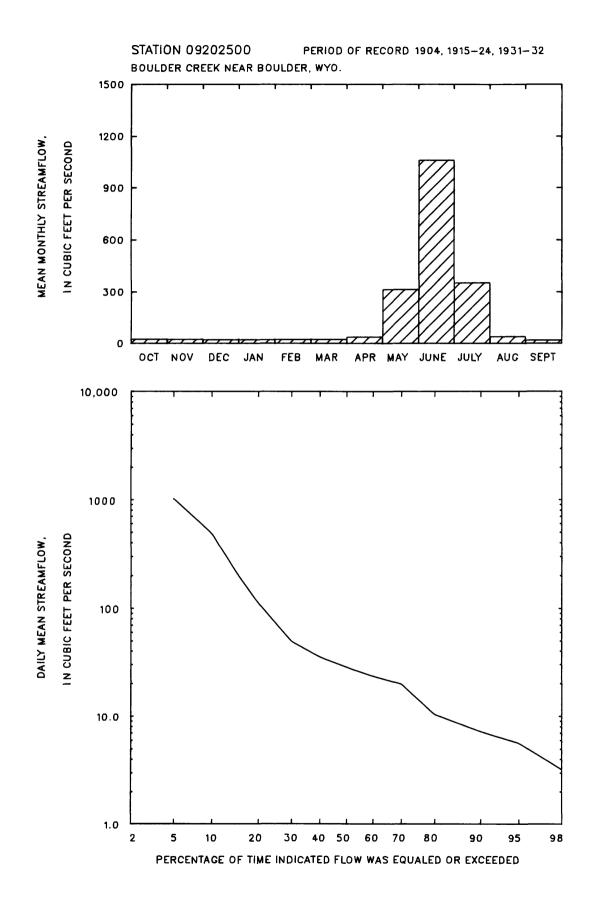
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1904, 1915-24, 1931-32

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	and
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	2080	2760	3030			
3	1970	2670	2980			
7	1790	2500	2830			
15	1530	2180	2480			
30	1200	1710	1940			
60	851	1150	1260			
90	611	830	909			

Duration of daily mean flow for period of record 1904, 1915-24, 1931-32

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded 1	for indi	cated p	percenta	ge of t	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2190	1020	486	204	111	49	35	28	23	20	10	7.1	5.6	3.2	2.9	2.8	1.2



09203000 EAST FORK RIVER NEAR BIG SANDY, WYO.

LOCATION.--Lat 42°40', long 109°25', in sec.7, T.31 N., R.105 W., Sublette County, on left bank 1.0 mi downstream from Jim Creek and 4.0 mi northeast of Big Sandy.

DRAINAGE AREA. -- 79.2 mi².

PERIOD OF RECORD. --October 1938 to current year. Prior to October 1967, published as East Fork near Big Sandy. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,800 ft, by barometer.

REMARKS. -- No diversion above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 1,790 ft³/s, June 11, 1965, gage height, 7.16 ft, from rating curve extended above 1,200 ft³/s on basis of slope-area measurement at gage height 6.88 ft; minimum observed, 1.2 ft³/s, January 4, 1940, January 25, 1977 (discharge measurements).

Monthly and annual streamflow 1939-84

Magnitude	and	probabi:	lity	οf	ann	ual	low	flow
base	ed or	period	οf	reco	ord	1940)-84	

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		Dischar recurre on-exce
		(== ,=,	(== / =/				tive days)	2 50%	5 20%
October	57	3.0	21	15	0.71	1.7			
November	42	2.7	15	9.4	0.63	1.2			
December	23	1.2	11	6.0	0.53	0.9	1	5.1	2.7
January	25	1.1	10	5.5	0.53	0.8	3	5.4	2.9
February	27	1.3	10	5.2	0.51	0.8	7	5.7	3.2
March	33	2.3	11	5.3	0.48	0.9	14	6.3	3.4
April	150	7.2	32	30	0.93	2.6	30	6.9	3.8
May	646	73	328	125	0.38	26.2	60	7.9	4.3
June	1000	141	562	216	0.38	44.9	90	8.8	4.9
July	504	29	189	123	0.65	15.1	120	9.6	5.6
August	103	3.0	40	26	0.64	3.2	183	11	7.3
September	67	5.1	22	16	0.72	1.8			
Annual	150	42	104	28	0.27	100			

harge, in ft3/s, for indicated rrence interval, in years, and xceedance probability, in percent 100 10 20 50 0% 10% 5% 2% 1% 0.99 0.77 1.9 1.4 .9 2.1 1.5 1.0 0.80

2.2

2.4

2.6

3.0

4.0

5.7

1.6

1.7

1.9

2.1

2.4

2.9

4.7

1.1

1.2

1.3

1.4

1.6

2.0

3.7

0.88

0.89

0.94

1.0

1.2

1.5

3.2

Magnitude and probability of annual high flow based on period of record 1939-84

Magnitude and probability of instantaneous peak flow based on 46 years of record

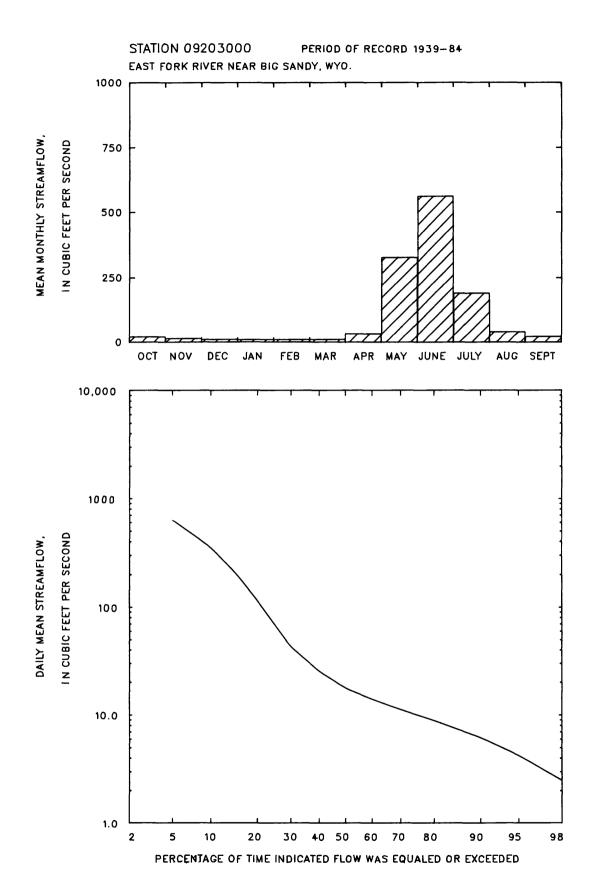
			^-	5 0	100
50%	5 20%	10 10%	25 4%	50 2%	100 1%
JU /6	20%	10%	46	<u> </u>	16
300	1530	1650	1760	1820	1880

Weighted skew = -0.738

Period (con-		recurren	e, in ft ce inter ce proba	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1130	1350	1450	1550	1600	1640
3	1050	1260	1360	1460	1520	1570
7	928	1130	1230	1320	1380	1430
15	804	988	1080	1160	1210	1250
30	672	824	893	956	991	1020
60	497	614	667	717	744	766
90	371	461	502	542	563	581

Duration of daily mean flow for period of record 1939-84

Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1060	625	351	199	115	43	25	17	14	11	8.8	6.2	4.2	2.5	1.8	1.3	1.2



09204000 SILVER CREEK NEAR BIG SANDY, WYO.

LOCATION.--Lat 42°45', long 109°31', sec. 17, T.32 N., R.106 W., Sublette County, on right bank at Miller Ranch, 1 mi downstream from South Fork, 8 mi northwest of Big Sandy, and 11 mi east of Boulder.

DRAINAGE AREA. -- 45.4 mi2.

PERIOD OF RECORD. -- October 1938 to September 1971. Monthly discharge only for some periods; published in WSP 1313. GAGE. -- Water-stage recorder. Altitude of gage is 7,500 ft, by barometer.

REMARKS.--Some regulation 9.5 mi upstream by Silver Lake (capacity, 2,150 acre-ft). Diversion above station for irrigation of about 90 acres above and below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft³/s May 28, 1951, gage height, 7.53 ft; no flow at times in most years.

Monthly and annual streamflow 1939-71

Magnitude and probability of annual low flow based on period of record 1940-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
0-4-1	.,,	0.01		0.0		
October	44	0.01	5.9	9.3	1.6	1.1
November	19	0.00	4.0	4.5	1.1	0.8
December	9.1	0.00	3.1	2.6	0.84	0.6
January	6.6	0.00	2.7	2.0	0.75	0.5
February	6.0	0.00	2.6	1.7	0.65	0.5
March	7.6	0.06	3.3	1.8	0.57	0.6
April	48	1.7	14	13	0.92	2.7
May	377	42	191	86	0.45	36.2
June	563	41	250	136	0.55	47.3
July	134	2.6	41	28	0.69	7.7
August	14	0.00	2.8	3.2	1.1	0.5
September	44	0.00	8.7	12	1.4	1.6
Annual	68	15	44	13	0.30	100

Period (con-		recurren	ce inter	3/s, for val, in y obability	ears, an	ıd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00		
14	0.05	0.00	0.00	0.00		
30	0.12	0.00	0.00	0.00		
60	0.60	0.03	0.00	0.00		
90	1.0	0.26	0.08	0.00		
120	1.4	0.45	0.17	0.00		
183	1.9	0.77	0.36	0.00		

Magnitude and probability of instantaneous peak flow based on 31 years of record

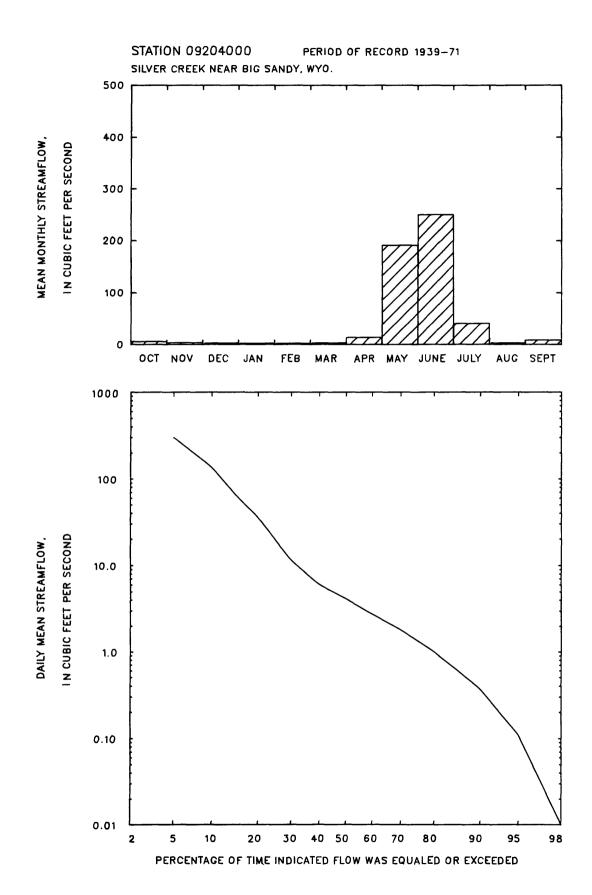
			ndicated i e probabil		
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
725	887	976	1070	1140	1190

Magnitude and probability of annual high flow based on period of record 1939-71

Period (con-		recurre	ncé inte	t ³ /s, for rval, in ability,	years, a	and
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	600	746	817	886		
3	562	698	765	832		
7	499	629	698	770		
15	421	538	597	656		
30	343	437	484	533		
60	228	294	327	361		
90	164	210	233	256		

Duration of daily mean flow for period of record 1939-71

Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
577	301	137	62	36	11	6.0	4.1	2.8	1.8	1.0	0.37	0.11	0.01	0.01	0.00	0.00



09204500 EAST FORK AT NEWFORK, WYO.

LOCATION.--Lat 42°42', long 109°43', in sec.33, T.32 N., R.108 W., Sublette County, 0.25 mi south of Newfork and 1 mi upstream from mouth.

DRAINAGE AREA. -- 348 mi².

PERIOD OF RECORD.--October 1904 to October 1906, October 1914 to October 1924, October 1930 to October 1932. Published as "at New Fork" in Water-Supply Papers 469 and 618.

GAGE.--Staff gage after April 17, 1931. Altitude of gage is 6,900 ft, estimated on basis of known elevation 0.2 mi away. April 1, 1905, to April 30, 1906, staff gage 0.25 mi upstream at different datum. May 1 to October 31, 1906, staff gage at same site at datum 0.23 ft lower. May 11, 1915, to November 1, 1924, staff gage at same site at datum 0.50 ft lower.

REMARKS.--Adjudicated diversions above station for irrigation of about 17,000 acres above and below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft³/s June 19, 1917, gage height, 6.7 ft; minimum not determined, occurred during period of no gage-height record.

Monthly and annual streamflow 1905-06, 1915-24, 1931-32

Magnitude and probability of annual low flow based on period of record 1906, 1916-24, 1932

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	99	36	58	18	0.31	2.8
November	70	30	51	14	0.28	2.5
December	65	30	44	12	0.28	2.1
January	60	25	40	10	0.26	1.9
February	55	25	41	8.8	0.22	2.0
March	94	30	48	16	0.34	2.3
April	179	50	83	36	0.43	4.0
May	713	205	448	168	0.38	21.7
June	1530	113	941	463	0.49	45.7
July	716	40	188	174	0.93	9.1
August	120	35	64	21	0.33	3.1
September	81	34	54	13	0.23	2.6
Annual	257	69	171	53	0.31	100

Discharge, in ft³/s, for indicated recurrence interval, in years, and Period non-exceedance probability, in percent (consecutive 50% 20% 10% 2% days) 5% 1% ___

Magnitude and probability of annual high flow based on period of record 1905-06, 1915-24, 1931-32

Magnitude and probability of instantaneous peak flow based on 13 years of record

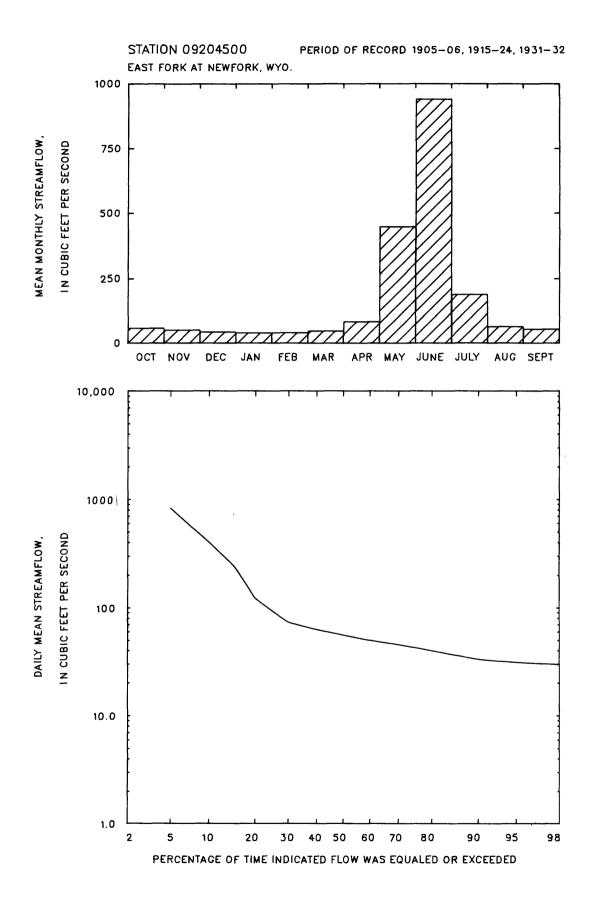
Discharge, in ft ³ /s, for indicated recurrence interval in years, and exceedance probability, in percent										
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%					
2210	2830	3170	3520	3740	3940					

Weighted skew = -0.660

Period (con-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedance probability, in percent											
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%						
1	2100	2830	3080									
3	1920	2680	2980									
7	1630	2420	2810									
15	1330	2090	2510									
30	1090	1610	1880									
60	768	1020	1110									
90	555	732	797									

Duration of daily mean flow for period of record 1905-06, 1915-24, 1931-32

Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time													licated percentage of time											s equaled or exceeded for indicated percentage of time						
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%														
2100	823	403	240	122	73	63	56	50	45	40	33	31	29	28	27	25														



09205000 NEW FORK RIVER NEAR BIG PINEY, WYO.

LOCATION.--Lat 42°34'02", long 109°55'46", in SE½NE½NE½ sec.22, T.30 N., R.110 W., Sublette County, on right bank 35 ft downstream from old highway bridge, 3.4 mi upstream from mouth, and 9.5 mi northeast of Big Piney.

DRAINAGE AREA. -- 1,230 mi², approximately.

PERIOD OF RECORD. -- September 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,800 ft, from topographic map.

REMARKS.--Natural flow of stream affected by storage reservoirs, power development, and diversions for irrigation of about 62,100 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, $9,170 \text{ ft}^3/\text{s}$, June 10, 1972, gage height, 8.15 ft; minimum daily, $90 \text{ ft}^3/\text{s}$, January 13, 1963.

Monthly and annual streamflow 1955-84

Magnitude and probability of annual low flow based on period of record 1956-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	989	202	385	179	0.46	4.3
November	608	194	322	94	0.29	3.6
December	397	148	246	58	0.24	2.7
January	277	129	200	40	0.20	2.2
February	337	139	210	49	0.23	2.3
March	597	161	258	90	0.35	2.9
April	1110	181	439	204	0.47	4.9
May	2540	254	1060	522	0.49	11.8
June	6070	907	3110	1140	0.37	34.7
July	4160	405	1740	1050	0.60	19.5
August	1280	255	603	278	0.46	6.7
September	766	192	390	154	0.40	4.4
Annual	1110	313	747	215	0.29	100

Period (con-	1	ecurren	ce inter	3/s, for val, in y bability	ears, a	ıd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	158	128	113	101	89	
3	165	138	124	113	102	
7	171	144	131	120	108	
14	178	150	136	126	114	
30	184	157	145	135	125	
60	194	168	156	147	137	
90	202	177	167	159	151	
120	217	190	178	170	161	
183	254	217	204	195	187	

Magnitude and probability of instantaneous peak flow based on 30 years of record

2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

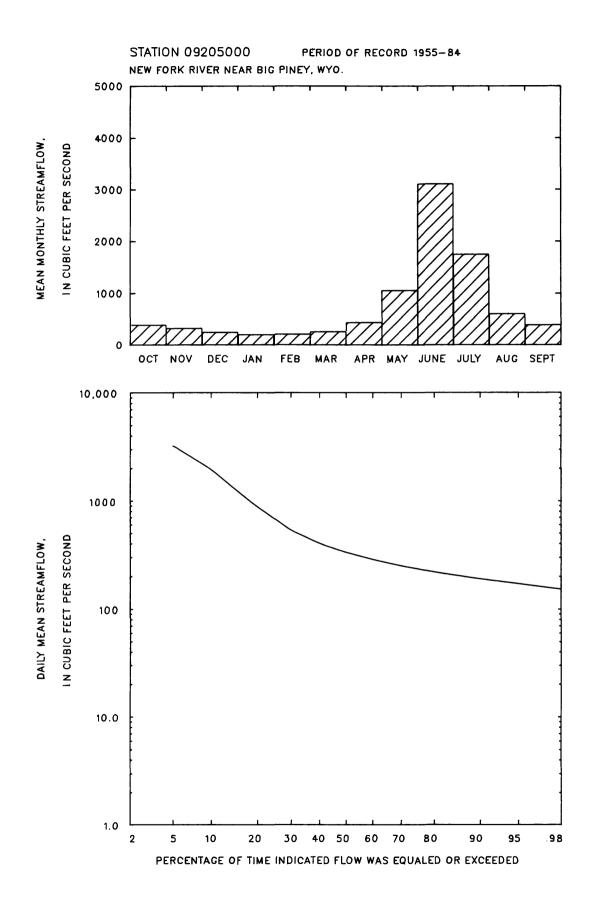
Weighted skew = -0.477

Magnitude and probability of annual high flow based on period of record 1955-84

Period (con-		Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedance probability, in percent											
secu- tive	2	5	10	25	50	100							
days)	50%	20%	10%	4%	2%	1%							
1	5310	6760	7470	8150	8540								
3	5120	6550	7250	7920	8320								
7	4750	6100	6770	7450	7850								
15	4170	5490	6150	6810	7200								
30	3560	4650	5130	5560	5790								
60	2650	3480	3860	4190	4360								
90	2060	2700	2990	3250	3390								

Duration of daily mean flow for period of record 1955-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
5370	3220	1960	1240	875	528	398	329	285	249	217	189	170	151	143	135	118



09205500 NORTH PINEY CREEK NEAR MASON, WYO.

LOCATION.--Lat 42°39'30", long 110°20'30", in SE% sec.19, T.31 N., R.113 W., Sublette County, on left bank 3 mi west of Mason and 15 mi northwest of Big Piney.

DRAINAGE AREA. -- 58 mi² approximately.

PERIOD OF RECORD.--May 1915 to October 1916, October 1931 to October 1971, May to September 1972. Monthly discharge only for some periods, published in WSP 1313. Published as "near Marbleton" 1915-16.

GAGE.--Water-stage recorder. Altitude of gage is 7,520 ft, from topographic map. Prior to October 6, 1970, at site 600 ft upstream at different datums.

REMARKS.--Diversions above station for irrigation of about 610 acres above and below station. Hidden ditch No. 1 bypasses the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 747 ft³/s June 22, 1971, maximum gage height, 5.52 ft June 27, 1971; minimum daily discharge, 3.1 ft³/s March 15, 1967.

Monthly and annual streamflow 1916, 1932-71

Magnitude and probability of annual low flow based on period of record 1933-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	cé interv	l/s, for val, in yobability	ears, an	ıd
Honen	(1t ⁻ /s)	(10-/8)	(10-/8)	(IL-/S)	acton		tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	33	13	22	5.0	0.23	3.2							
November	29	10	18	4.1	0.23	2.6							
December	24	7.5	14	3.6	0.26	2.0	1	9.8	7.2	6.0	5.1	4.1	
January	22	7.1	12	3.6	0.29	1.8	3	10	7.4	6.1	5.2	4.2	
February	26	6.3	13	4.1	0.33	1.8	7	10	7.6	6.4	5.4	4.4	
March	25	4.4	14	4.3	0.30	2.1	14	11	8.0	6.7	5.8	4.8	
April	90	8.5	30	16	0.55	4.4	30	11	8.4	7.3	6.4	5.6	
May	249	48	118	54	0.46	17.3	60	11	9.0	7.9	7.1	6.3	
June	522	54	247	90	0.37	36.1	90	12	9.5	8.4	7.6	6.7	
July	286	19	123	70	0.57	18.0	120	13	10	8.9	8.0	7.2	
August	87	13	45	16	0.35	6.5	183	15	12	11	10	9.0	
September	57	12	28	8.4	0.30	4.1							
Annua1	104	24	57	18	0.31	100							

Magnitude and probability of instantaneous peak flow based on 43 years of record

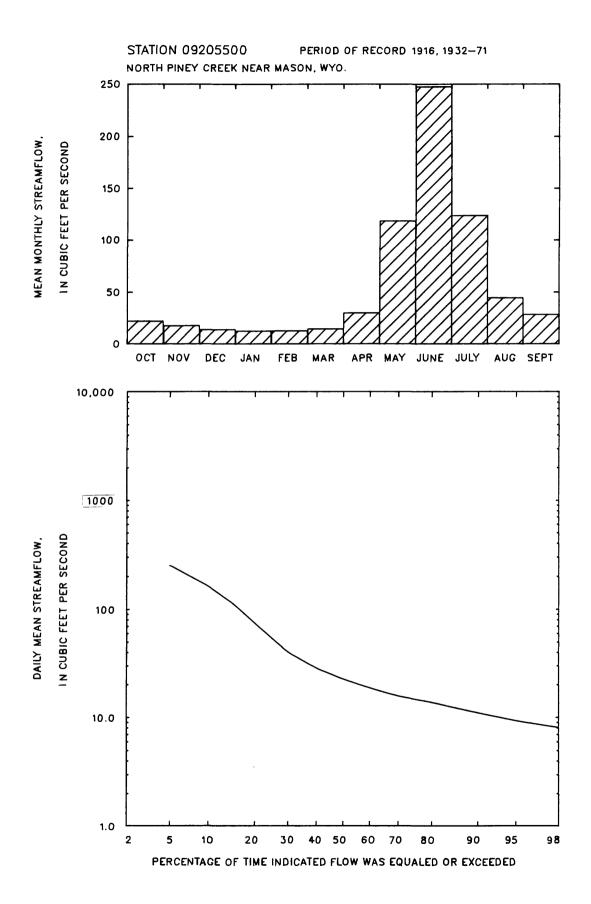
	ge, in ft ³ ears, and				e interva percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
398	524	600	690	753	813

Magnitude and probability of annual high flow based on period of record 1916, 1932-71

Period (con-		recurre	nce inte	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	370	486	553	627	677	
3	354	468	536	613	666	
7	330	442	510	590	646	
15	297	401	467	548	605	
30	256	345	403	473	524	
60	199	269	314	368	407	
90	157	214	250	293	324	

Duration of daily mean flow for period of record 1916, 1932-71

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
421	251	163	111	75	40	28	22	19	16	14	11	9.3	8.0	7.2	6.4	4.3



09206000 MIDDLE PINEY CREEK BELOW SOUTH FORK, NEAR BIG PINEY, WYO.

LOCATION.--Lat 42°36'10", long 110°27'20", in sec.7 T.30 N., R.114 W., Sublette County, on left bank 1 mi downstream from South Fork and 18 mi northwest of Big Piney.

DRAINAGE AREA. -- 34.3 mi2.

PERIOD OF RECORD .-- July 1939 to September 1954. Monthly discharge only for some periods; published in WSP 1313.

GAGE .-- Water-stage recorder. Altitude of gage is 7,980 ft, from topographic map.

REMARKS. -- Flow regulated by Middle Piney Lake (usable capacity, 4,200 acre-ft). Adjudicated diversions for irrigation of about 400 acres of hay meadows above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 254 ft³/s June 29, 1943, from rating curve extended above 190 ft³/s; maximum gage height, 6.41 ft May 28, 1951; minimum discharge not determined, occurred during period of ice effect.

Monthly and annual streamflow 1940, 1942-54

Magnitude and probability of annual low flow based on period of record 1943-54

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		recurren	cé inter	³ /s, for val, in y obability	years, a	nd
			(10 /3)		acton		tive days)	2 50%	5 2 0%	10 10%	20 5%	50 2%	100 1%
October	18	6.8	11	3.3	0.28	3.3							
November	15	5.1	8.7	2.8	0.32	2.5							
December	13	1.5	6.3	3.0	0.48	1.8	1	5.0	3.3	2.7	2.2		
January	12	2.0	5.5	2.7	0.49	1.6	3	5.1	3.4	2.7	2.3		
February	11	3.0	5.7	2.4	0.42	1.6	7	5.1	3.4	2.8	2.3		
March	12	4.0	6.6	2.6	0.39	1.9	14	5.2	3.6	2.9	2.4		
April	35	6.4	14	9.3	0.64	4.2	30	5.3	3.6	2.9	2.4		
May	93	14	47	26	0.55	13.6	60	5.5	3.9	3.3	2.8		
June	170	37	99	42	0.42	28.7	90	5.6	4.2	3.6	3.2		
July	172	25	94	43	0.45	27.3	120	5.9	4.4	3.9	3.5		
August	51	9.4	32	14	0.44	9.1	183	7.3	5.6	4.9	4.5		
September	23	7.6	15	4.8	0.32	4.3							
Annual	46	12	29	11	0.37	100							

Magnitude and probability of instantaneous peak flow based on 15 years of record

				lity, in	F
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

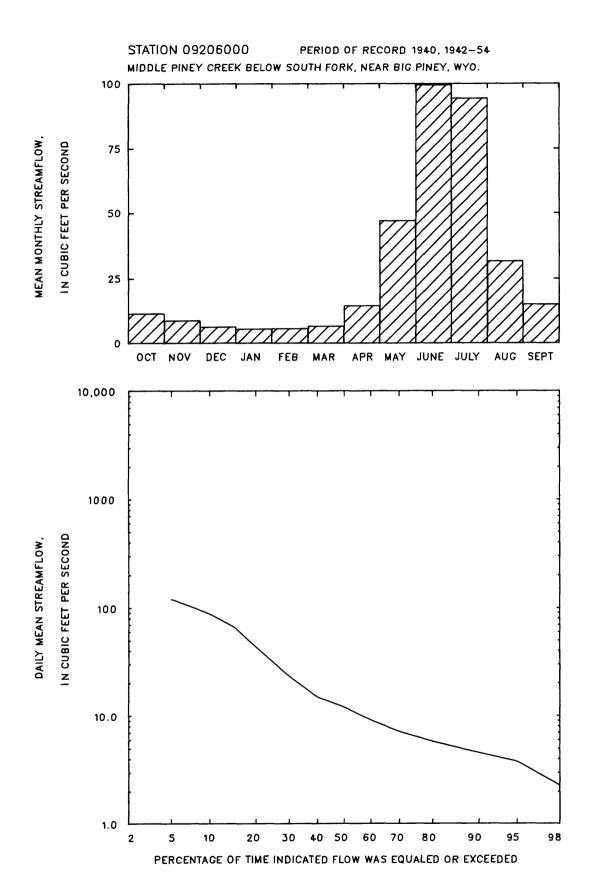
Weighted skew = -0.210

Magnitude and probability of annual high flow based on period of record 1940, 1942-54

Period (con-		recurre	ice inte	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
	1/0	100	222			
3	142 138	199 195	230 227			
3 7	138	195	216			
15	126	178	206			
30	115	163	190			
60	96	135	158			
90	80	113	133			

Duration of daily mean flow for period of record 1940, 1942-54

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
198	119	88	65	43	23	15	12	9.0	7.1	5.8	4.5	3.8	2.3	2.1	1.8	1.5



09208000 LA BARGE CREEK NEAR LA BARGE MEADOWS RANGER STATION, WYO.

LOCATION.--Lat 42°30'30", long 110°40'10", in SE½ sec.8, T.29 N., R.116 W., Lincoln County, Bridger National Forest, on right bank 0.5 mi upstream from Crystal Creek, 2.0 mi southeast of La Barge Meadows ranger station, and 29 mi northwest of La Barge.

DRAINAGE AREA. -- 6.3 mi², approximately.

PERIOD OF RECORD.--October 1940 to September 1942, October 1950 to September 1981. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,410 ft, from topographic map. October 1, 1940, to September 30, 1942, at site 300 ft upstream at different datum. October 31, 1950, to August 30, 1972, on left bank at present datum.

REMARKS. -- No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 196 ft³/s June 9, 1972, gage height, 5.48 ft; maximum gage height, 7.08 ft November 26, 1967 (backwater from snow); minimum daily discharge, 1.3 ft³/s January 29, to February 2, 1963.

Monthly and annual streamflow 1951-81

Magnitude and probability of annual low flow based on period of record 1952-81

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	cient of vari-	Percent of annual runoff	Period (con- secu-		recurren	cé inter	val, in	indicato years, an y, in per	nd
	(20 / 5)	(10 / 0)		(10 / 5)			tive days)	2 50%	5 20%	10 10%	20 5 %	50 2%	100 1%
October	8.0	3.9	5.8	0.96	0.16	3.4					_ ·		
November	6.1	3.2	4.8	0.69	0.14	2.8							
December	9.8	2.9	4.2	1.2	0.29	2.4	1	2.8	2.4	2.1	1.8	1.5	
January	5.3	1.8	3.6	0.80	0.22	2.1	3	3.0	2.5	2.2	1.9	1.6	
February	5.3	2.0	3.6	0.69	0.19	2.1	7	3.1	2.6	2.2	1.9	1.6	
March	4.5	2.7	3.6	0.48	0.13	2.1	14	3.2	2.7	2.3	2.0	1.7	
April	26	3.1	6.4	4.2	0.66	3.7	30	3.3	2.8	2.4	2.1	1.7	
May	86	12	40	18	0.44	23.3	60	3.5	2.9	2.6	2.3	2.0	
June	123	10	64	28	0.44	37.6	90	3.5	3.1	2.8	2.6	2.4	
July	56	4.5	20	12	0.58	11.9	120	3.7	3.3	3.1	2.9	2.7	
August	14	4.8	8.4	2.4	0.28	4.9	183	4.3	3.8	3.7	3.5	3.3	
September	9.7	3.3	6.3	1.3	0.20	3.7	***************************************	,			, , , , , , , , , , , , , , , , , , , 		
Annual	21	5.8	14	3.6	0.25	100							

Magnitude and probability of instantaneous peak flow based on 33 years of record

2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

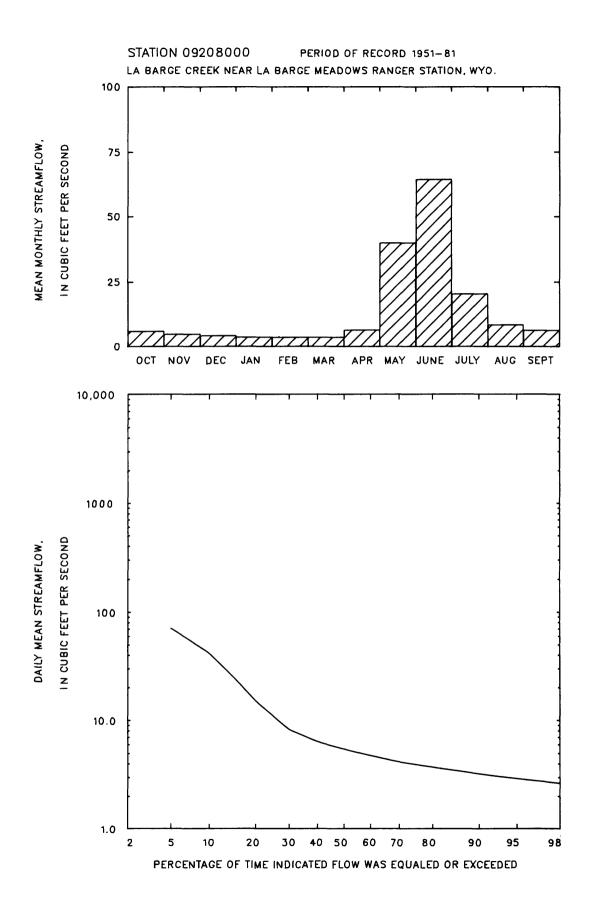
Weighted skew = -0.312

Duration of daily mean flow for period of record 1951-81

Period (con-		recurre	ice inte	c ³ /s, for cval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	115	141	148	153	154	
3	110	134	141	145	147	
7	102	125	132	136	138	
15	94	113	118	121	122	
30	81	98	103	105	106	
60	59	73	77	81	82	
90	44	55	59	62	64	

Magnitude and probability of annual high flow based on period of record 1951-81

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
116	71	4 2	24	15	8.2	6.3	5.4	4.7	4.1	3.7	3.2	2.9	2.6	2.4	2.3	1.4



09209400 GREEN RIVER NEAR LA BARGE, WYO.

LOCATION.--Lat 42°11'34", long 110°09'45", in SE\SE\NW\z sec.33, T.26 N., R.112 W., Lincoln County, on right bank
1.7 mi upstream from high-water line of Fontenelle Reservoir at elevation 6,513 ft, 4.0 mi upstream from Muddy
Creek, and 5.0 mi south of La Barge.

DRAINAGE AREA. -- 3,910 mi², approximately.

PERIOD OF RECORD.--October 1963 to current year. Records are equivalent to those published August 1946 to March 1965 as Green River near Fontenelle (sta 09209500).

GAGE. -- Water-stage recorder. Altitude of gage is 6,520 ft, from topographic map.

REMARKS.--Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 198,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s, June 11, 1972, gage height, 10.34 ft; minimum daily, 188 ft³/s, May 17, 1977.

Monthly and annual streamflow 1964-84

Magnitude and probability of annual low flow based on period of record 1965-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
0.1.1	0050	500	005	207	0.44	, ,
October	2050 1310	509 497	895 771	397 231	0.44 0.30	4.3 3.7
November	-		–			
December	866	396	565	129	0.23	2.7
January	608	369	476	77	0.16	2.3
February	678	409	504	73	0.14	2.4
March	1570	426	676	243	0.36	3.2
April	2390	469	1410	471	0.33	6.7
May	5090	305	2970	1240	0.42	14.2
June	12200	1680	6130	2630	0.43	29.2
July	7990	911	3980	2110	0.53	18.9
August	3190	656	1620	698	0.43	7.7
September		469	998	403	0.40	4.8
Annual	2550	668	1750	508	0.29	100

Period (con-	1	recurren	cé interv	3/s, for val, in y obability	ears, a	nd
secu- tive days)	2 50%	5 20 %	10 10%	20 5 %	50 2%	100 1%
1	379	308	268	235		
3	389	320	281	249		
7	406	333	293	259		
14	422	347	307	273		
30	446	375	337	307		
60	468	411	384	362		
90	496	441	414	394		
120	523	460	433	412		
183	608	511	473	447		

Magnitude and probability of instantaneous peak flow based on --- years of record

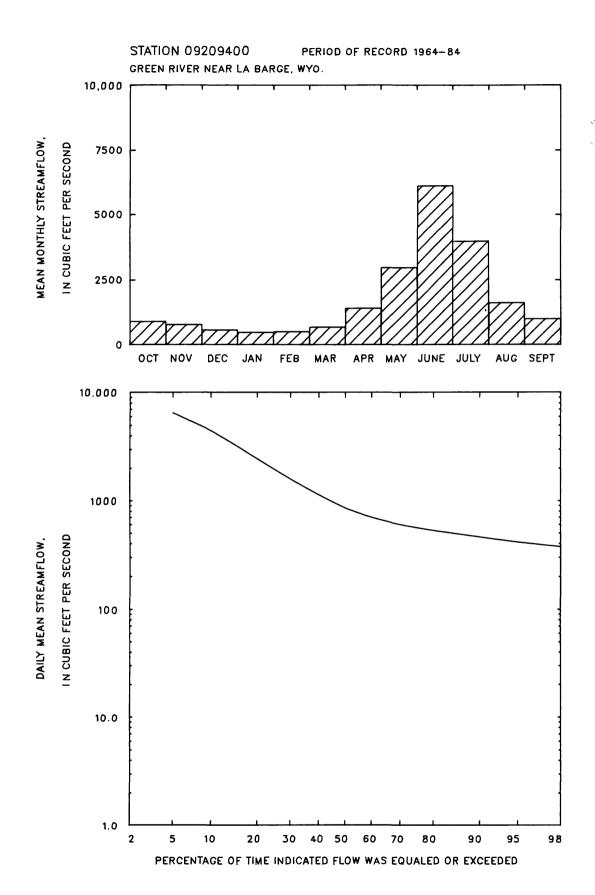
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1964-84

Period (con-		recurre	ence inte	ft ³ /s, fo erval, in pability,	years,	and
secu- tive days)	2 50%	5 20 %	10 1 0%	25 4%	50 2%	100 1%
1	9760	12900	14600	16400		
3	9370	12500	14300	16100		
7	8400	11600	13500	15600		
15	7410	10600	12500	14700		
30	6750	9270	10500	11700		
60	5490	7390	8240	8980		
90	4550	6030	6670	7210		

Duration of daily mean flow for period of record 1964-84

		Dis	charge,	in ft ³	s, which	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
10800	6470	4460	3220	2450	1590	1130	850	694	592	523	454	408	371	338	303	229



09209500 GREEN RIVER NEAR FONTENELLE, WYO.

LOCATION.--Lat 42°07', long 110°11', in SW\(\frac{1}{2}\) sec.20 T.25 N., R.112 W., Lincoln County, on right bank 200 ft from U.S. Highway 189, 1.5 mi downstream from Muddy Creek, and 4 mi northwest of Fontenelle.

DRAINAGE AREA. -- 3,970 mi2.

PERIOD OF RECORD.--August 1946 to March 1965. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 6,490 ft, from river-profile survey.

REMARKS.--Natural flow of stream affected by storage reservoirs, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft³/s June 6, 1956, gage height, 8.33 ft; minimum daily, 200 ft³/s December 25-29, 1962.

Monthly and annual streamflow 1947-64

Magnitude and probability of annual low flow based on period of record 1948-65

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	ce inter	val, in y	indicate years, an y, in per	nd
			(10 / 0)	(10 ,0)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	1040	476	715	188	0.26	3.8							
November	1010	389	628	176	0.28	3.3							
December	723	281	480	130	0.27	2.5	1	294	247	225	207		
January	622	275	424	103	0.24	2.2	3	303	252	228	210		
February	726	320	461	122	0.26	2.4	7	316	261	238	221		
March	1230	428	674	197	0.29	3.6	14	334	280	258	242		
April	3160	777	1510	724	0.48	8.0	30	359	304	283	267		
May	5290	1040	3130	1470	0.47	16.6	60	387	328	303	286		
June	8760	2690	5650	1770	0.31	30.0	90	414	356	332	314		
July	6060	751	3060	1620	0.53	16.2	120	451	390	363	343		
August	3010	579	1370	627	0.46	7.3	183	521	452	424	404		
September	1310	467	768	270	0.35	4.1							
Annual	2420	791	1570	472	0.30	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

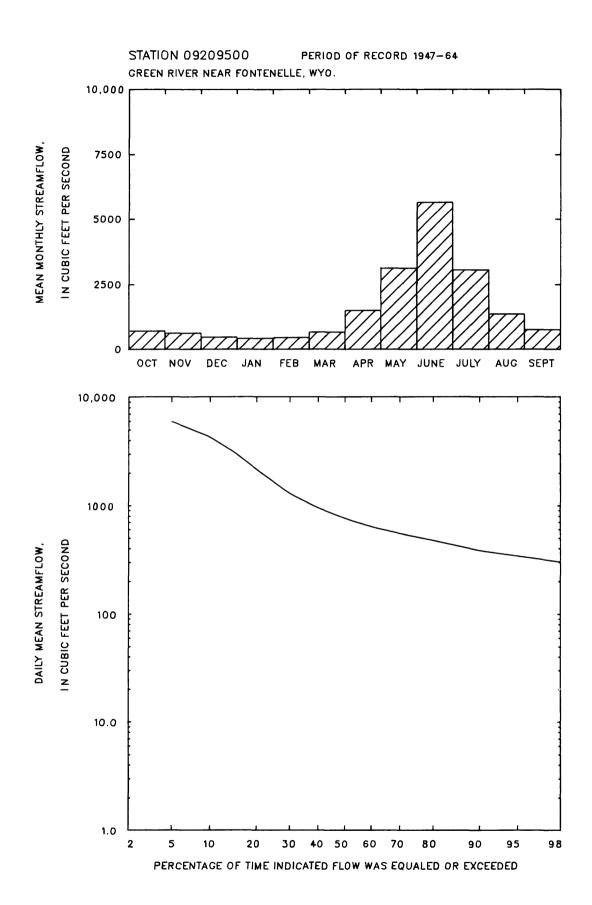
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1947-64

Period (con-		recurre	nce inter	c ³ /s, for cval, in ability,	years, a	and
secu- tíve days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	9600	11700	12600	13300		
3	9270	11400	12300	13100		
7	8490	10600	11600	12500		
15	7410	9230	10100	10900		
30	6110	7840	8750	9700		
60	4930	6400	7100	7780		
90	4020	5340	6010	6680		

Duration of daily mean flow for period of record 1947-64

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
9820	5900	4270	3040	2160	1280	947	757	632	550	473	381	338	299	277	261	220



09210500 FONTENELLE CREEK NEAR HERSCHLER RANCH, NEAR FONTENELLE, WYO.

LOCATION.--Lat 42°05'46", long 110°24'57", in NW\x8W\x8NE\x sec.2, T.24 N., R.115 W., Lincoln County, on left bank 2.0 mi downstream from Dutch George Creek and 14 mi west of Fontenelle.

DRAINAGE AREA. -- 152 mi2.

PERIOD OF RECORD. -- August 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,950 ft, from topographic map. Prior to May 5, 1970, at site 300 ft downstream at present datum.

REMARKS.--Diversions for irrigation of about 780 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 821 ft³/s, June 13, 1965, gage height, 6.87 ft, site then in use; maximum gage height, 9.20 ft, May 27, 1983; minimum daily discharge, 8.8 ft³/s, August 4, 1977.

Monthly and annual streamflow 1952-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	46	19	32	6.9	0.21	3.6
November	45	20	30	6.2	0.20	3.4
December	40	17	27	6.0	0.22	3.0
January	39	15	26	5.9	0.22	2.9
February	37	15	27	5.1	0.19	3.0
March	54	19	31	8.8	0.29	3.4
April	229	35	97	48	0.50	10.8
May	437	32	233	115	0.50	25.9
June	525	20	242	134	0.56	27.0
July	185	17	82	48	0.58	9.1
August	76	11	39	16	0.41	4.3
September	56	13	32	11	0.34	3.5
Annual	128	25	75	28	0.37	100

Magnitude and probability of annual low flow based on period of record 1953-84

Period (con-	1	cecurren	e interv	/s, for i al, in ye bability,	ars, and	i
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100
1	17	13	11	8.9	7.2	
3	18	13	11	9.3	7.5	
7	19	14	12	9.9	7.9	
14	20	15	13	11	9.5	
30	22	17	15	13	11	
60	23	19	17	15	13	
90	24	20	18	16	15	
120	25	21	19	18	16	
183	27	23	21	20	18	

Magnitude and probability of instantaneous peak flow based on 33 years of record

			e probabi	lity, in	percent
2	5	10	25	50	100
50%	20%	10%	4%	2 % 	1%
493	678	785	906	986	1060

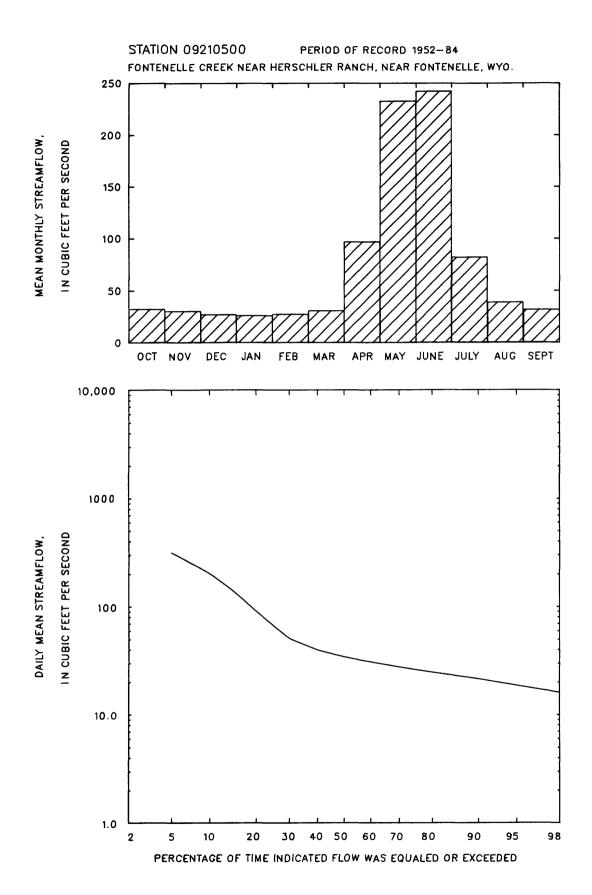
Weighted skew = -0.517

Magnitude and probability of annual high flow based on period of record 1952-84

Period (con-		recurre	ge, in fi nce inter nce proba	rval, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	440	605	668	716	737	
3	405	569	638	694	721	
7	370	526	594	650	678	
15	334	485	555	615	645	
30	293	433	500	561	593	
60	237	358	420	481	516	
90	1 9 5	2 9 0	339	388	416	

Duration of daily mean flow for period of record 1952-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
505	313	203	135	91	51	40	34	31	27	25	21	19	16	15	13	8.6



09211000 FONTENELLE CREEK NEAR FONTENELLE, WYO.

LOCATION.--Lat 42°05'50", long 110°13'20", in sec.3, T.24 N., R.113 W., Lincoln County, on left bank 5 mi west of Fontenelle and 5 mi upstream from mouth.

PERIOD OF RECORD.--May 1914 to September 1919 (no winter records 1914-15), October 1931 to September 1953. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 6,580 ft, by barometer. Prior to September 30, 1919, staff gage at site 150 ft upstream at different datum. October 1, 1931, to July 29, 1938, staff gage 150 ft upstream at datum 0.90 ft higher.

REMARKS. -- Diversions for irrigation of about 8,120 acres (part of which is above and part below station) adjudicated by Wyoming for diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 922 ft³/s April 19, 1938, gage height, 4.00 ft, site and datum then in use, from rating curve extended above 380 ft3/s; no flow August 1-5, August 23 to September 15, 1934, June 27-30, September 18-27, 1940.

Monthly and annual streamflow 1916-19, 1932-53

Magnitude	and probability of annual	low flow
based on	period of record 1917-19,	1933-53

Month	Maximum (ft³/s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	71	9.8	32	13	0.41	4.0
November	46	12	30	8.1	0.27	3.8
December	40	12	25	8.9	0.35	3.2
January	40	7.3	22	8.5	0.39	2.8
February	46	8.5	23	9.5	0.41	2.9
March	101	14	34	18	0.53	4.2
April	269	13	122	69	0.57	15.4
May	482	7.6	207	133	0.64	26.1
June	617	3.4	188	147	0.78	23.7
July	201	1.7	49	46	0.95	6.1
August	83	0.47	35	21	0.61	4.4
September	51	0.54	27	13	0.50	3.4
Annual	144	12	66	34	0.52	100

Discharge, in ft³/s, for indicated recurrence interval, in years, and Period non-exceedance probability, in percent (consecu-

10

10%

0.0

0.0

20%

3.2

3.7

20

5%

0.0

0.0

100

1%

2%

2

50%

13

14

tive

days)

1

3

7	15	4.1	0.0	0.0	
14	19	4.6	0.34	0.0	
30	20	6.1	2.2	0.72	
60	21	8.3	3.9	1.8	
90	22	10	5.6	3.1	
120	24	12	7.2	4.3	
183	27	16	11	7.3	

Magnitude and probability of instantaneous peak flow based on --- years of record

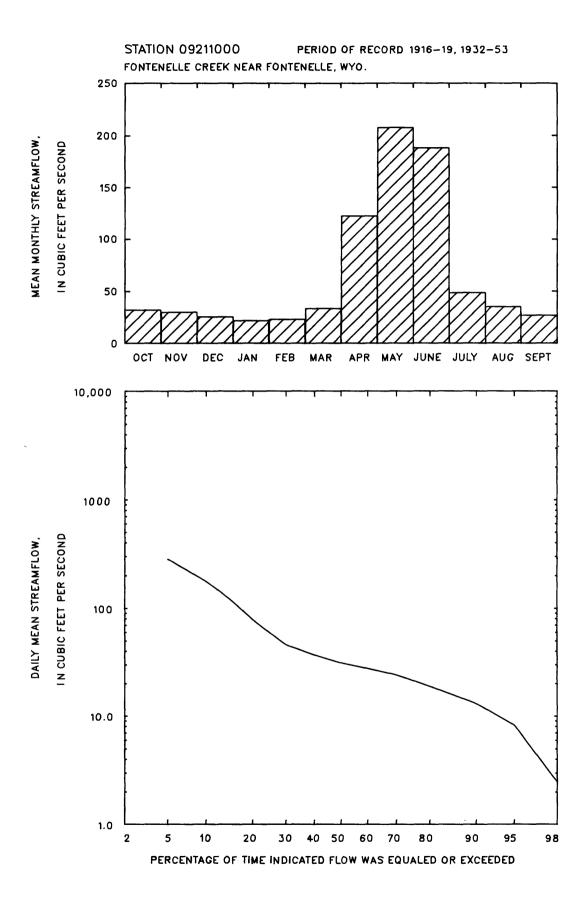
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1916-19, 1932-53

Period (con-		recurre	rge, in ince inter nce proba	rval, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100
1	368	592	699	793		
3	334	547	656	760		
7	294	496	607	720		
15	262	445	550	660		
30	225	386	482	586		
60	191	333	422	521		
90	159	274	346	428		

Duration of daily mean flow for period of record 1916-19, 1932-53

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
499	282	177	117	78	46	37	31	28	24	19	13	8.2	2.5	0.85	0.28	0.04



09211200 GREEN RIVER BELOW FONTENELLE RESERVOIR, WYO.

LOCATION.--Lat 42°01'16", long 110°02'57", in NW\N\N\NE\ sec.31, T.24 N., R.111 W., Sweetwater County, on right bank 1.0 mi downstream from Fontenelle Dam, 2.5 mi upstream from Slate Creek, and 6.0 mi southeast of Fontenelle.

DRAINAGE AREA.--4,280 mi², approximately.

PERIOD OF RECORD. -- November 1963 to current year.

GAGE. -- Water-stage recorder. Datum of gage is 6,378.13 ft.

REMARKS. -- Flow completely regulated by Fontenelle Reservoir 1.0 mi upstream. Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 202,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,400 ft³/s, September 5, 1965, gage height, 18.74 ft, from floodmarks, caused by emergency release from Fontenelle Reservoir; minimum daily discharge, 209 ft3/s, November 22-24, 1968.

Monthly and annual streamflow 1965-84

Magnitude and probability of annual low flow based on period of record 1965-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-	:	recurren	cé inter	³ /s, for val, in y obability	years, a	nd
	(10 /8)	(10 /8)	(10 /8)	(10-78)	acton	Tunoti	tive days)	2 50%	5 2 0%	10 10%	20 5%	50 2%	100 1%
October	31 40	3 59	1050	613	0.58	4.9							
November	1520	404	837	275	0.33	3.9							
December	1270	272	772	264	0.34	3.6	1	3 90	291	248	216		
January	1200	273	817	283	0.35	3.8	3	419	310	261	226		
February	1820	262	899	434	0.48	4.2	7	469	355	304	266		
March	1540	505	960	334	0.35	4.5	14	522	3 85	3 20	272		
April	2480	370	1480	591	0.40	6.9	30	568	404	3 29	274		
May	4880	534	2510	1280	0.51	11.7	60	633	447	362	298		
June	9800	465	5120	2350	0.46	24.0	90	683	472	375	304		
July	7870	364	3 6 30	2240	0.62	17.0	120	730	509	405	328		
August	3470	367	1800	729	0.40	8.5	183	829	596	490	411		
September	7890	531	1480	1560	1.1	6.9							
Annua1	2780	690	1780	546	0.31	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

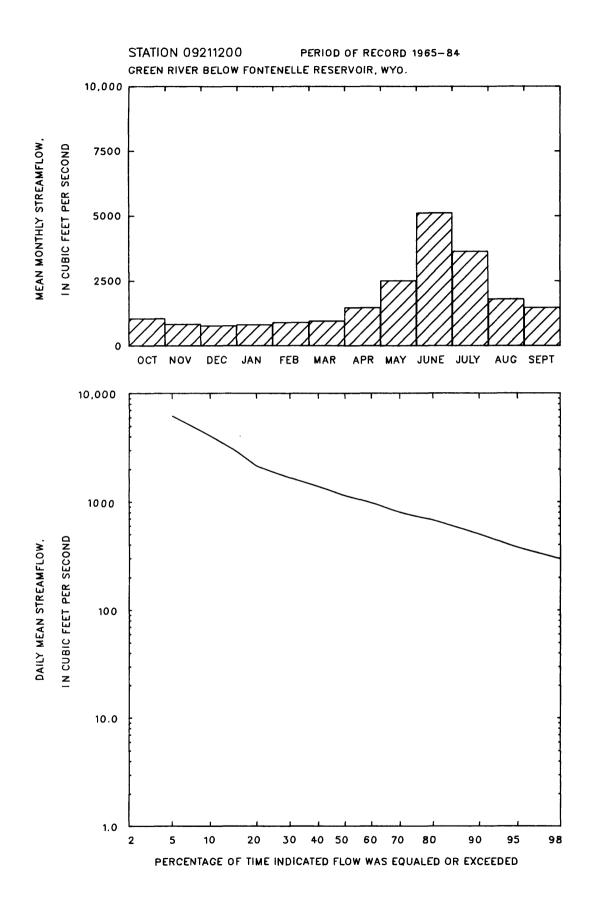
				checedane	ars, and	Discharg in ye
0	10	50	25	10	5	2
%		2%	4%	10%	20%	50%
%		2%	4%	10%	20%	50%

Magnitude and probability of annual high flow based on period of record 1965-84

Period (con-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedance probability, in percent												
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%							
1	7860	12400	14800	17200									
3	7710	12100	14400	16700									
7	7370	11400	13400	15300									
15	6600	9870	11400	12800									
30	5710	8390	9680	10900									
60	4620	6810	7970	9150									
90	3900	5590	6500	7430									

Duration of daily mean flow for period of record 1965-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
9690	6130	4040	2920	2130	1650	1380	1130	979	789	673	498	374	292	264	251	241



09212500 BIG SANDY RIVER AT LECKIE RANCH, NEAR BIG SANDY, WYO.

LOCATION.--Lat 42°34'17", long 109°16'58", in sec.17, T.30 N., R.104 W., Sublette County, on left bank at Leckie Ranch, 0.1 mi downstream from Squaw Creek, and 10.1 mi southeast of Big Sandy.

DRAINAGE AREA. -- 94 mi2.

PERIOD OF RECORD.--July to November 1910, May to August 1911, July 1939 to current year (no winter records since 1971). Monthly discharge only for some periods; published in WSP 1313. Published as Big Sandy Creek near Big Sandy 1910-11, in WSP 618; and as Big Sandy Creek at Leckie Ranch near Big Sandy, July 1939 to October 1968.

GAGE.--Water-stage recorder. Altitude of gage is 7,800 ft, by barometer. See WSP 1733 for history of changes prior to July 24, 1939. July 24, 1939, to June 1, 1961, water-stage recorder at site 75 ft downstream at present datum.

REMARKS. -- Diversions for irrigation of about 750 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,580 ft³/s, June 10, 1965, gage height, 9.06 ft, from rating curve extended above 1,000 ft³/s; minimum daily, 3.0 ft³/s, December 17, 1964.

Monthly and annual streamflow 1940-71

Magnitude and probability of annual low flow based on period of record 1941-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	58	9.5	26	12	0.45	2.6
November	41	10	20	7.2	0.36	1.9
December	33	5.0	16	6.3	0.40	1.5
January	27	4.0	13	5.3	0.40	1.3
February	25	3.5	13	5.3	0.40	1.3
March	36	8.0	16	5.7	0.36	1.5
April	150	13	47	31	0.66	4.5
May	444	88	248	83	0.33	24.0
June	799	121	393	154	0.39	38.1
July	403	34	162	97	0.60	15.7
August	101	12	48	26	0.54	4.7
September	63	10	29	15	0.52	2.8
Annual	139	40	86	24	0.28	100

based	on	period	of	record	1941-71

Period (con-		Discharge recurrence on-exceed	ce interv	, .	ears, an	d
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100
1	9.8	6.6	5.2	4.2	3.3	
3	10	6.8	5.4	4.4	3.4	
7	10	7.0	5.5	4.5	3.5	
14	11	7.4	5.9	4.9	3.8	
30	12	8.1	6.5	5.4	4.2	
60	12	8.5	6.9	5.7	4.6	
90	13	9.2	7.5	6.3	5.0	
120	14	10	8.5	7.2	5.9	
183	16	13	11	10	9.5	

Magnitude and probability of instantaneous peak flow based on 46 years of record

2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
928	1210	1380	1580	1720	1860

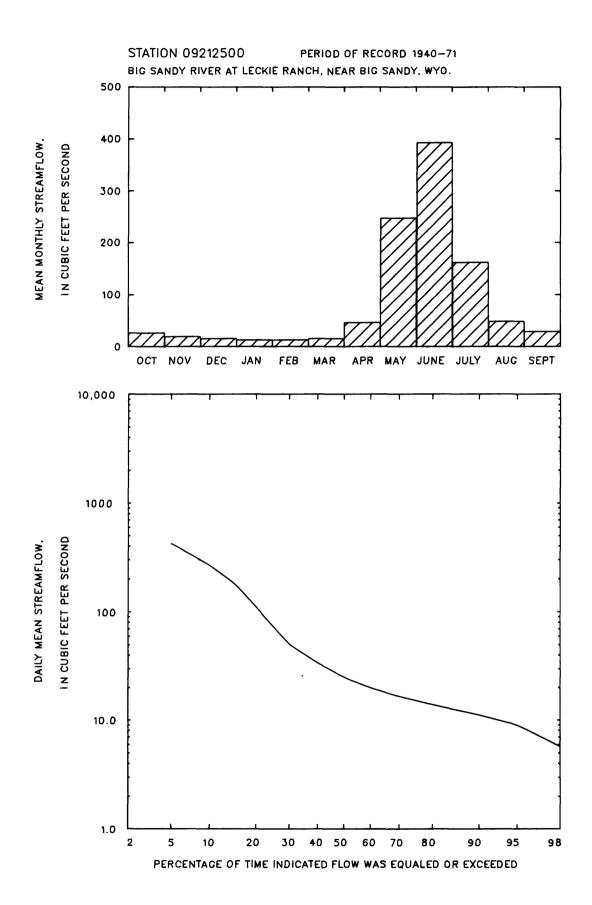
Weighted skew = -0.195

Magnitude and probability of annual high flow based on period of record 1940-71

Period (con-		recurre	ge, in ft ice inter ice proba	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	737	990	1150	1340	1480	
3	676	891	1020	1180	1290	
7	603	781	879	985	1050	
15	521	673	7 5 5	842	897	
30	431	559	635	722	783	
60	344	443	497	556	595	
90	268	346	388	435	465	

Duration of daily mean flow for period of record 1940-71

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
713	420	267	178	111	5 0	34	25	20	16	14	11	8.9	5.7	4.5	3.8	3.2



09213500 BIG SANDY RIVER NEAR FARSON, WYO.

LOCATION.--Lat 42°19'01", long 109°29'06", in NW\sE\nW\sec.17, T.27 N., R.106 W., Sublette County, on left upstream side of Eden Canal diversion, about 1.0 mi upstream from high-water line of Big Sandy Reservoir, 14.5 mi north of Farson, and 24.5 mi upstream from Little Sandy Creek.

DRAINAGE AREA, -- 322 mi².

PERIOD OF RECORD.--October 1914 to September 1917, October 1920 to October 1924, October 1926 to September 1934,
April 1953 to current year (no winter records since 1971). Prior to October 1968, published as Big Sandy Creek
near Farson. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,770 ft, from topographic map. Prior to April 28, 1921, non-recording gage, and April 28, 1921, to August 3, 1934, water-stage recorder at site 0.5 mi upstream at different datum. April 17, 1953, to November 11, 1954, water-stage recorder at site 1.5 mi upstream at different datum.

REMARKS.--Diversions for irrigation of about 1,000 acres above station. The Eden Canal, which bypasses the station, has not been used since station was established at present site in November 1954.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft³/s, June 9, 1972, gage height, 8.10 ft; no flow January 27-31, 1963, and may have also reached no flow in previous years during periods of ice effect.

Monthly and annual streamflow 1916-17, 1921-24, 1927-34, 1954-71

Magnitude and probability of annual low flow based on period of record 1916-17, 1922-24, 1928-34, 1955-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	76	8.9	30	17	0.56	2.9
November	41	9.2	21	8.3	0.39	2.1
December	22	3.0	13	5.1	0.39	1.3
January	23	0.30	11	5.3	0.48	1.1
February	26	0.10	12	5.1	0.43	1.2
March	47	3.0	22	9.5	0.43	2.1
April	146	23	51	26	0.52	4.9
May	454	89	235	91	0.39	22.6
June	705	56	405	177	0.44	39.0
July	419	14	167	114	0.68	16.1
August	155	8.5	45	31	0.70	4.3
September	84	2.1	27	20	0.74	2.6
Annual	148	33	87	29	0.34	100

Period (con-		recurren	e, in ft ³ ce interv dance pro	al, in ye	ars, an	đ
secu- tive days)	2 5 0%	5 20%	10 10%	20 5%	50 2%	100
1	6.6	1.7	0.30	0.00	0.00	
3	7.2	1.9	0.30	0.00	0.00	
7	7.5	2.4	1.0	0.44	0.15	
14	8.6	3.1	1.4	0.63	0.21	
30	10	3.8	1.7	0.72	0.23	
60	12	5.1	2.4	1.1	0.40	
90	12	6.5	4.0	2.4	1.3	
120	14	8.3	5.8	4.1	2.5	
183	17	12	10	8.8	7.6	

Magnitude and probability of instantaneous peak flow based on 47 years of record

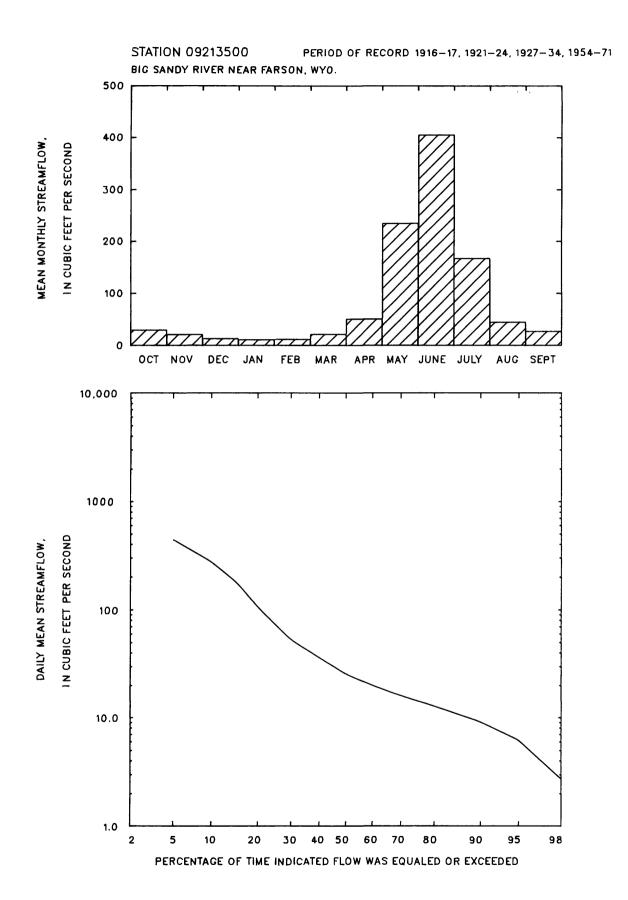
Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent 2 10 50 100 50% 20% 2% 10% 1% 846 1130 1300 1500 1630 1750 Weighted skew = -0.408

Magnitude and probability of annual high flow based on period of record 1916-17, 1921-24, 1927-34, 1954-71

Period (con-		recurre	ge, in ft nce inter nce proba	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	717	978	1120	1280	1370	
3	671	911	1040	1180	1270	
7	599	820	936	1050	1120	
15	525	724	826	928	988	
30	453	615	699	784	835	
60	351	471	530	587	620	
90	272	368	416	464	492	

Duration of daily mean flow for period of record 1916-17, 1921-24, 1927-34, 1954-71

Discharge, in $\mathrm{ft^3/s}$, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
730	438	275	177	106	53	36	25	20	16	13	9.0	6.1	2.7	1.1	0.29	0.11



09214000 LITTLE SANDY CREEK NEAR ELKHORN, WYO.

LOCATION.--Lat 42°32'02", long 109°12'15", in NE%NW%NW% sec.36, T.30 N., R.104 W., Sublette County, on left bank 500 ft upstream from road bridge, 1.5 mi downstream from Continental Divide ditch diversion, and 7 mi northeast of Elkhorn.

DRAINAGE AREA. -- 20.9 mi2.

PERIOD OF RECORD. --July 1939 to September 1971. Monthly discharge only for some periods; published in WSP 1313.

GAGE .-- Water-stage recorder. Altitude of gage is 8,000 ft, estimated on basis of nearby bench mark.

REMARKS. -- Transbasin diversion above station by Continental Divide ditch which diverts water from Little Sandy Creek in SEANWANEA sec.25, T.30 N., R.104 W., to land along Lander Creek (tributary to Sweetwater River in Platte River basin). The appropriation permit is for 22.71 ft3/s, but no discharge record is available. Diversion for irrigation of about 680 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 425 ft³/s June 16, 1963, gage height, 4.52 ft; maximum gage height, 4.66 ft April 29, 1955 (backwater from ice); minimum daily discharge, 0.5 ft³/s September 13, 18, 1955, but may have been less during periods of ice effect.

Monthly and annual streamflow 1940-71

Magnitude and probability of annual low flow based on period of record 1941-71

Maximum (f+3/e)	Minimum	Mean	Stan- dard devia- tion	vari-	annual	Period (con-	:	recurren	cé interv	al, in y	ears, ar	ıd
	11000		(10 /8)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
15	1.4	6.8	4.2	0.62	2.7							
12	1.9	5.8	2.7	0.47	2.3							
8.0	1.5	4.7	1.9	0.40	1.9	1	2.2	1.3	0.91	0.69	0.50	
9.8	0.80	4.2	2.0	0.47	1.7	3	2.4	1.4	1.0	0.77	0.56	
7.4	1.6	4.1	1.5	0.35	1.6	7	2.6	1.6	1.2	0.95	0.73	
9.0	3.0	4.8	1.4	0.30	1.9	14	2.7	1.7	1.3	1.1	0.84	
30	4.5	11	5.8	0.53	4.3	30	2.9	2.0	1.6	1.3	1.1	
74	21	44	14	0.33	17.2	60	3.3	2.2	1.8	1.5	1.3	
138	38	92	27	0.29	36.1	90	3.6	2.6	2.1	1.8	1.5	
130	9.0	54	3 3	0.62	21.2	120	3.9	2.8	2.4	2.1	1.8	
41	2.8	16	9.1	0.58	6.2	183	4.7	3.4	2.9	2.5	2.1	
17	1.7	7.9	4.7	0.60	3.1							
33	10	21	5.8	0.27	100							
	15 12 8.0 9.8 7.4 9.0 30 74 138 130 41	15 1.4 12 1.9 8.0 1.5 9.8 0.80 7.4 1.6 9.0 3.0 30 4.5 74 21 138 38 130 9.0 41 2.8 17 1.7	(ft³/s) (ft³/s) (ft³/s) 15 1.4 6.8 12 1.9 5.8 8.0 1.5 4.7 9.8 0.80 4.2 7.4 1.6 4.1 9.0 3.0 4.8 30 4.5 11 74 21 44 138 38 92 130 9.0 54 41 2.8 16 17 1.7 7.9	Maximum Minimum Mean tion (ft³/s) (ft³/s) (ft³/s) (ft³/s) (ft³/s) (ft³/s) 15	Maximum Minimum Mean tion vari- (ft³/s) (ft³/s) (ft³/s) (ft³/s) (ft³/s) ation 	Maximum (ft³/s) Minimum (ft³/s) Mean tion varical (ft³/s) Coefficient of annual varical (ft³/s) Percent of annual varical (ft³/s) 15 1.4 6.8 4.2 0.62 2.7 12 1.9 5.8 2.7 0.47 2.3 8.0 1.5 4.7 1.9 0.40 1.9 9.8 0.80 4.2 2.0 0.47 1.7 7.4 1.6 4.1 1.5 0.35 1.6 9.0 3.0 4.8 1.4 0.30 1.9 30 4.5 11 5.8 0.53 4.3 74 21 44 14 0.33 17.2 138 38 92 27 0.29 36.1 130 9.0 54 33 0.62 21.2 41 2.8 16 9.1 0.58 6.2 17 1.7 7.9 4.7 0.60 3.1	Maximum Minimum Mean tion vari- annual (con- (ft³/s) (ft³/s) (ft³/s) (ft³/s) ation runoff secutive days)	Maximum Minimum Mean tion vari- annual (con- tive 2 days) 50%	Maximum Minimum Mean tion vari- annual (consormal confidence ft ³ /s) (ft ³ /s) ation runoff secutive days 50% 20% 20%	Maximum (ft³/s) Minimum (ft³/s) Mean (ft³/s) Coeffidevia- cient of devia- cient of devia- cient of devia- cient of of devia- cient of devia- cient of devia- cient of of security. Period annual componence cient of devia- non-exceedance products. Discharge, in ft³ recurrence intervence intervence cienters. Discharge, in ft³ recurrence cienters. Discharge, in ft² recurrence cienters. Discharge cienters.	Maximum Minimum Mean tion vari- annual (con- con- tion vari- annual (con- con- tion vari- annual (con- con- tion tion vari- annual (con- con- tion tion vari- tion tion tion vari- tion tion tion vari- tion tion tion vari- tion tion	Maximum Minimum Mean tion vari- annual (con- tive ft ³ /s) (ft ³ /s) ation runoff secutive tive 2 5 10 20 50 days) 50% 20% 10% 5% 2% 2% 10% 5% 2% 2% 10% 5% 2% 2% 10% 5% 2% 2% 10% 10% 5% 2% 2% 10

Magnitude and probability of instantaneous peak flow based on 32 years of record

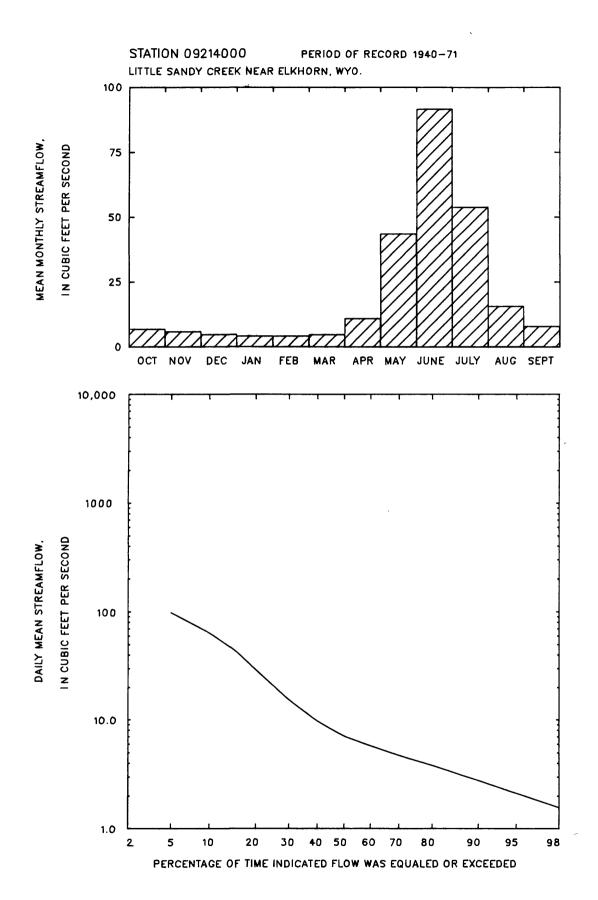
Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent 100 10 50% 20% 4% 2% 10% 1% 201 260 295 336 363 390 Weighted skew = -0.280

Magnitude and probability of annual high flow based on period of record 1940-71

Period (con-		recurre	ge, in fi nce inter nce proba	rval, in	years,	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	177	223	249	278	297	
3	162	202	223	246	261	
7	147	180	197	215	226	
15	125	154	170	187	198	
30	104	129	142	157	167	
60	80	101	114	127	136	
90	63	81	91	102	109	

Duration of daily mean flow for period of record 1940-71

Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
167	97	64	44	29	15	9.6	7.0	5.7	4.7	3.8	2.8	2.1	1.6	1.4	1.2	0.75



09214500 LITTLE SANDY CREEK ABOVE EDEN, WYO.

LOCATION.--Lat 42°14'12", long 109°18'44", in SE½SW½SW½ sec.11 T.26 N., R.105 W., Sweetwater County, on right bank 1.6 mi upstream from diversion to Eden No. 2 Reservoir, 11 mi northeast of Farson, and 14 mi northeast of Eden. DRAINAGE AREA.--134 mi².

PERIOD OF RECORD .-- October 1954 to September 1981.

GAGE.--Water-stage recorder. Altitude of gage is 6,750 ft, from topographic map.

REMARKS. -- Diversions above station for irrigation of about 1,220 acres, of which about 150 acres are below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft³/s April 24, 1980, gage height, 11.89 ft from rating curve extended above 520 ft³/s on basis of computation of peak flow over spillway and weir; no flow at times in most years.

Monthly and annual streamflow 1955-81

Magnitude a	nd	probabi	ilit	y of	annual	low	flow
based	on	period	of	recor	d 1956	-81	

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	18	0.00	5.8	4.7	0.80	2.5
November	15	1.8	6.2	3.0	0.80	2.3
December	9.4	0.71	4.2	2.2	0.52	1.8
January	5.8	0.21	3.0	1.9	0.64	1.3
February	7.4	0.75	3.3	1.9	0.59	1.4
March	37	2.6	9.6	9.0	0.94	4.2
April	102	10	27	20	0.73	11.8
May	80	9.6	39	17	0.44	16.9
June	128	24	77	31	0.40	33.5
July	120	0.71	41	35	0.86	17.7
August	29	0.00	9.1	7.8	0.86	4.0
September	22	0.00	4.9	5.4	1.1	2.1
Annua1	34	6.4	19	7.8	0.40	100

Period (con-		Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent											
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%							
1	0.00	0.00	0.00	0.00									
3	0.00	0.00	0.00	0.00									
7	0.00	0.00	0.00	0.00									
14	0.11	0.00	0.00	0.00									
30	0.38	0.00	0.00	0.00									
60	0.85	0.00	0.00	0.00									
90	2.0	0.25	0.00	0.00									
120	2.9	1.1	0.56	0.29									
183	3.7	2.0	1.4	1.0									

Magnitude and probability of instantaneous peak flow based on --- years of record

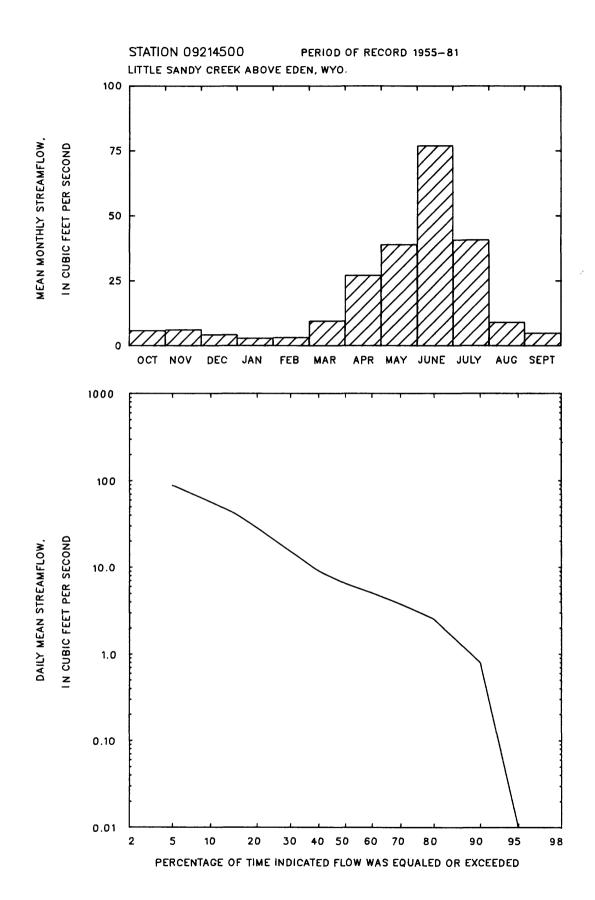
in years	, and	exceedance			e interval percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1955-81

Period (con-		recurre	ice inte	t ³ /s, for cval, in ability,	years, a	and
secu- tive days)	2 5 0%	5 20%	10 10%	25 4%	50 2%	100 1%
1	149	238	321	461		
3	140	218	284	387		
7	127	185	224	274		
15	105	150	177	209		
30	87	123	142	162		
60	65	93	109	126		
90	54	77	91	106		

Duration of daily mean flow for period of record 1955-81

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or ind	icated p	percent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
161	88	56	40	28	15	8.9	6.4	5.0	3.7	2.5	0.79	0.01	0.00	0.00	0.00	0.00



09215000 PACIFIC CREEK NEAR FARSON, WYO.

LOCATION.--Lat 42°07'47", long 109°19'23", in NW\sW\nE\s sec.22 T.25 N., R.105 W., Sweetwater County, on right bank 200 ft upstream from Eden Canal siphon, 6.3 mi east of Farson, and 7.2 mi upstream from mouth.

DRAINAGE AREA. -- 500 mi², approximately.

PERIOD OF RECORD. -- October 1954 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 6,660 ft, from topographic map. Prior to October 30, 1963, at site 1.0 mi upstream at different datum.

REMARKS. -- Some regulation by Pacific No. 2 Reservoir, capacity, 1,400 acre-ft. Diversions for irrigation of about 50 acres above station. Water is imported into basin from Sweetwater River in Platte River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 972 ft³/s March 27, 1971, gage height, 7.34 ft; no flow for many days each year.

Monthly and annual streamflow 1955-73

Magnitude and probability of annual low flow based on period of record 1956-73

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu- tive	V
							days)	
October	1.0	0.00	0.15	0.32	2.2	0.2		
November	0.90	0.00	0.16	0.27	1.7	0.3		
December	13	0.00	0.68	2.9	4.3	1.1	1	C
January	4.4	0.00	0.23	1.0	4.3	0.4	3	C
February	9.2	0.00	0.75	2.3	3.1	1.3	7	C
March	105	0.00	22	27	1.2	36.5	14	C
April	119	4.1	26	27	1.1	42.9	30	C
May	28	0.00	4.9	6.8	1.4	8.2	60	C
June	16	0.00	2.1	3.7	1.7	3.5	90	C
July	35	0.00	2.3	8.0	3.5	3.8	120	C
August	5.1	0.00	0.45	1.2	2.6	0.8	183	C
September	6.9	0.00	0.61	1.7	2.8	1.0		-
Annual	19	0.95	5.0	4.1	0.83	100		

Period (con- secu-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent								
tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%			
1	0.00	0.00							
3	0.00	0.00							
7	0.00	0.00							
14	0.00	0.00							
30	0.00	0.00							
60	0.00	0.00							
90	0.00	0.00							
120	0.00	0.00							
183	0.00	0.00							

Magnitude and probability of instantaneous peak flow based on 19 years of record

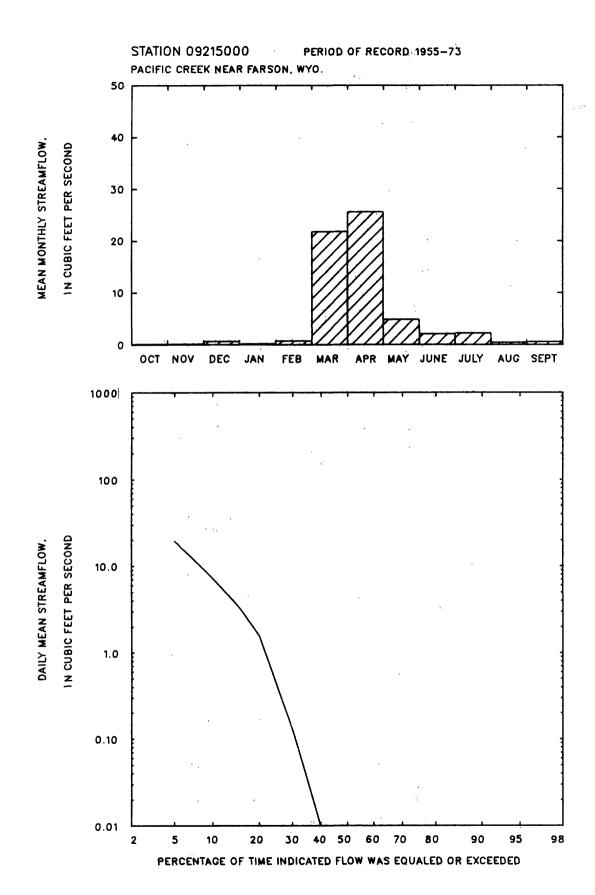
Discharge, in ft ³ /s, for indicated recurrence interval in years, and exceedance probability, in percent									
2 50%	5 20%	10 1 0%	25 4%	50 2%	100 1%				
265	557	789	1110	1360	1620				

Magnitude and probability of annual high flow based on period of record 1955-73

Period (con-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedance probability, in percent									
tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%				
1	161	322								
3	120	255								
7	80	174								
15	54	113								
30	34	69								
60	19	37								
90	14	27								

Duration of daily mean flow for period of record 1955-73

		Dis	charge,	in ft	3/s, wh	ich was	equale	d or ex	ceeded	for ind	icated	percent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	, 70%	80%	90%	95%	98%	99%	99.5%	99.9%
											,	*				
116	19	7.2	3.4	1.6	0.13	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



09216000 BIG SANDY RIVER BELOW EDEN, WYO.

LOCATION.--Lat 42°00'37", long 109°34'57", in NE¼SE½SW¼ sec.31 T.24 N., R.107 W., Sweetwater County, on right bank 0.1 mi downstream from Simpson Gulch, 8.0 mi southwest of Eden, and 12.5 mi downstream from Little Sandy Creek.

DRAINAGE AREA. -- 1,610 mi², approximately.

PERIOD OF RECORD.--October 1954 to August 10, 1981. Prior to October 1968, published as Big Sandy Creek below Eden. GAGE.--Water-stage recorder. Altitude of gage is 6,450 ft, from topographic map.

REMARKS.--Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 19,300 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,430 ft³/s April 24, 1980, gage height, 11.08 ft, from floodmarks, from rating curve extended above 1,300 ft³/s on basis of slope-area measurement of peak flow; minimum daily discharge, 0.1 ft³/s February 24, February 26 to March 1, 1960.

Monthly and annual streamflow 1955-80

Magnitude and probability of annual low flow based on period of record 1956-81

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	53	10	33	12	0.37	5.6
November	51	7.3	29	11	0.40	4.9
December	38	1.8	21	9.6	0.46	3.6
January	29	0.83	15	9.2	0.60	2.6
February	32	0.30	17	8.9	0.54	2.8
March	162	14	45	34	0.75	7.8
April	420	20	92	81	0.88	15.8
May	232	9.3	55	57	1.0	9.5
June	464	14	95	98	1.0	16.4
July	329	18	86	77	0.89	14.8
August	86	7.5	52	22	0.43	9.0
September	72	8.8	42	19	0.44	7.2
Annual	92	11	49	23	0.47	100

Period (con-		recurren	ce interv	/s, for i al, in ye bability,	ars, and	1
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	11	3.4	1.3	0.50	0.14	
3	12	3.6	1.4	0.52	0.14	
7	13	4.0	1.6	0.64	0.19	
14	13	4.4	1.9	0.82	0.27	
30	14	5.1	2.4	1.1	0.41	
60	16	6.3	3.2	1.7	0.70	
90	17	7.9	4.5	2.6	1.3	
120	19	10	6.7	4.5	2.7	
183	24	15	11	7.8	5.4	

Magnitude and probability of instantaneous peak flow based on --- years of record

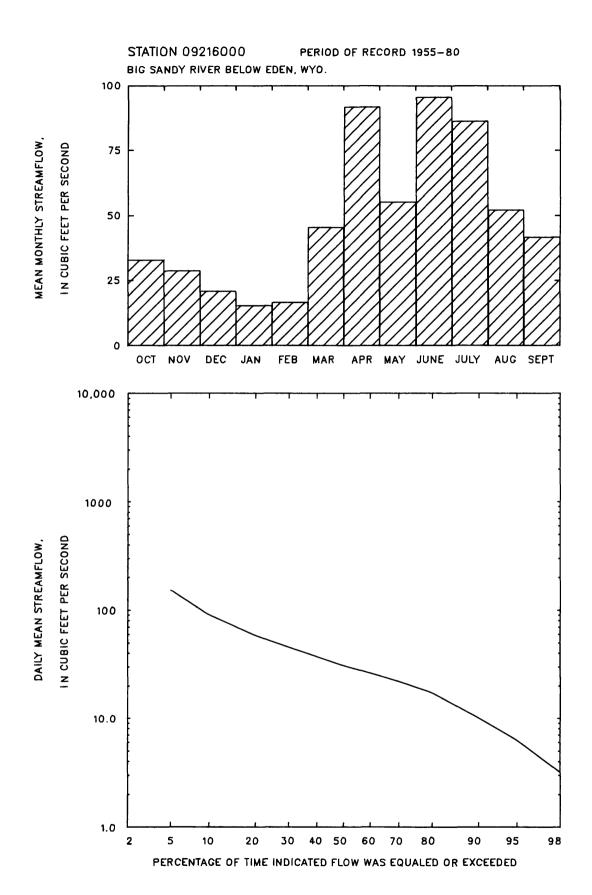
		/s, for in			
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1955-80

Period (con-		recurre	nce inter	val, in	<pre>/s, for indicated l, in years, and lity, in percent</pre>		
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%	
	224	(00	1100	1000	0000		
1	334	690	1100	1930	2900		
3	307	607	905	1440	1980		
7	249	469	663	971	1250		
15	187	353	495	712	903		
30	139	259	359	510	639		
60	99	177	240	331	406		
90	84	145	192	257	309		

Duration of daily mean flow for period of record 1955-80

	Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
372	152	90	71	58	45	37	31	26	22	17	10	6.3	3.2	1.1	0.61	0.20



09216050 BIG SANDY RIVER AT GASSON BRIDGE, NEAR EDEN, WYO.

LOCATION.--Lat 41°56'43", long 109°41'04", in NE\sW\nW\s sec.29, T.23 N., R.108 W., Sweetwater County, on left bank 0.2 mi upstream from Gasson Bridge and 14.5 mi southwest of Eden.

DRAINAGE AREA. -- 1,720 mi², approximately.

PERIOD OF RECORD. -- May 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,350 ft, from topographic map.

REMARKS.--Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 19,300 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,430 ft³/s, April 24, 1980, gage height, 10.58 ft, from rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 13 ft³/s, January 2, 1979.

Monthly and annual streamflow 1973-84

Magnitude and probability of annual low flow based on period of record 1974-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	cient of vari-	Percent of annual runoff	Period (con-	:	Disch recur
							tive days)	2 50%	5 20
October	102	46	70	15	0.22	7.2			
November	149	35	61	29	0.48	6.3			
December	60	23	43	12	0.29	4.4	1	22	1
January	56	23	34	9.6	0.28	3.5	3	24	1
February	74	22	39	15	0.38	4.0	7	25	1
March	196	36	71	45	0.64	7.3	14	27	2
April	462	51	155	116	0.75	16.1	30	29	2
May	208	42	88	56	0.64	9.1	60	31	2
June	335	45	113	80	0.71	11.7	90	34	2
July	290	65	123	72	0.59	12.7	120	38	3
August	119	51	90	21	0.23	9.3	183	46	3
September	100	42	81	17	0.21	8.4			
Annual	139	47	81	28	0.34	100			

Period (con- secu-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent								
tive days)	2 50%	5 20 %	10 10%	20 5%	50 2%	100 1%			
1	22	17	15	13					
3	24	18	16	14					
7	25	19	16	14					
14	27	21	18	17					
30	29	23	21	19					
60	31	25	22	21					
90	34	27	25	23					
120	38	30	27	25					
183	46	38	34	32					

Magnitude and probability of instantaneous peak flow based on --- years of record

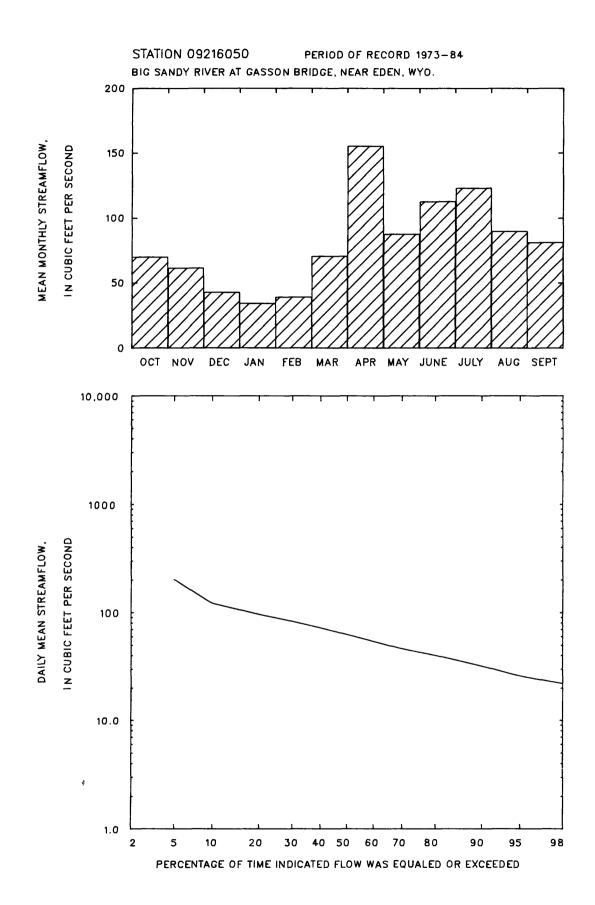
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1973-84

Period (con-		recurre	ge, in ft nce inter nce proba	val, in	years, a	and
secu- tive days)	2 50%	5 20 %	10 10 %	25 4%	50 2 %	100 1%
1	381	933	1710			
3	344	767	1280			
7	284	566	859			
15	220	391	543			
30	174	292	387			
60	135	212	270			
90	116	185	241			

Duration of daily mean flow for period of record 1973-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	5 0%	60%	70%	80%	90%	95 %	98%	99%	99.5%	99.9%
405	201	121	106	96	8 3	72	62	54	46	40	32	26	22	20	19	15



09216500 GREEN RIVER AT GREEN RIVER, WYO.

LOCATION.--Lat 41°32', long 109°29', in NW% sec.22, T.18 N., R.107 W., Sweetwater County, 100 ft downstream from railroad bridge at town of Green River, 1.5 mi from Bitter Creek and at mile 387.

DRAINAGE AREA. -- 7,670 mi² approximately.

PERIOD OF RECORD. -- July to August 1891, October 1894 to December 1899, October 1900 to December 1906, October 1914 to September 1945.

GAGE. -- Chain gage after September 28, 1920. Datum of gage is 6,071.07 ft. Prior to October 31, 1906, staff gage 60 ft upstream at different datum. March 5, 1915, to September 27, 1920, chain gage 0.75 mi downstream at different datum.

REMARKS. -- Natural flow of stream affected by transmountain diversion, storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 22,200 ft3/s June 19, 1918, gage height, 12.3 ft, site and datum then in use; minimum not determined, probably occurred during winter period.

COOPERATION. -- Records for 1891 furnished by State engineer of Wyoming. Records for 1940-45 estimated by the Engineering Advisory Committee to the Upper Colorado River Basin Compact Commission.

Monthly and annual streamflow 1896-99, 1901-06, 1915-39

Magnitude and probability of annual low flow based on period of record 1897-99, 1902-06, 1916-39

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	ce inter	³ /s, for val, in y	years, a	nd
							tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	1510	314	770	323	0.42	3.5							
November	1330	265	624	215	0.34	2.8							
December	700	260	461	121	0.26	2.1	1	345	267	232	205	177	
January	650	250	383	96	0.25	1.7	3	346	280	252	231	210	
February	700,	250	408	101	0.25	1.8	7	350	286	259	239	220	
March	1970	300	805	413	0.51	3.6	14	354	291	263	243	223	
April	2920	376	1780	675	0.38	8.0	30	358	295	268	248	228	
May	9770	1060	3690	1900	0.52	16.6	60	380	314	285	263	241	
June	13400	846	6920	3280	0.47	31.3	90	405	333	301	277	252	
July	14500	430	3800	2620	0.69	17.2	120	445	359	320	291	261	
August	5170	476	1590	873	0.55	7.2	183	541	416	361	320	2 79	
September	2060	258	918	414	0.45	4.1							
Annua1	3460	528	1850	608	0.33	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

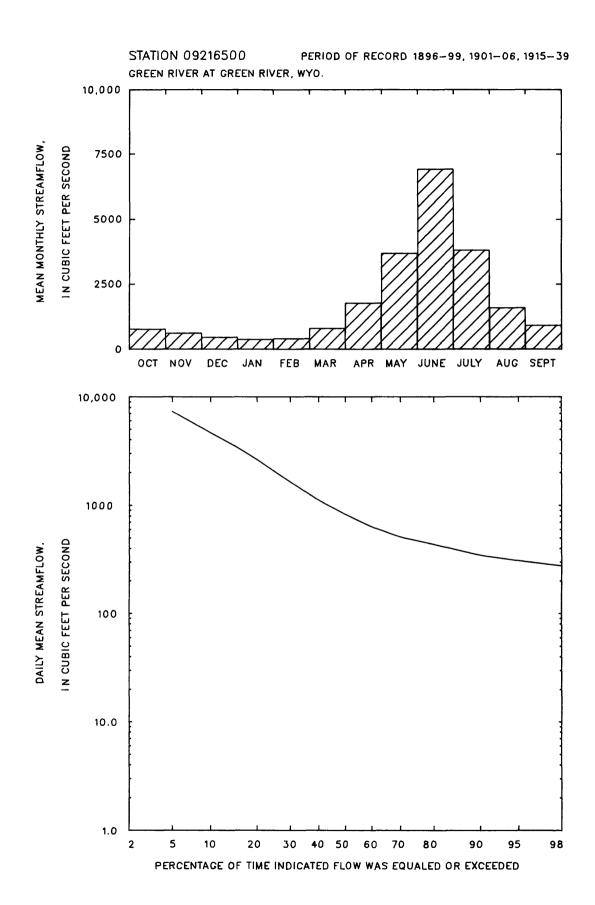
Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent 100 50% 20% 4% 2% 10% 1% ---------

Magnitude and probability of annual high flow based on period of record 1896-99, 1901-06, 1915-39

Period (con-		recurre	ice inte	rval, in	r indicat years, a in perce	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	11800	16500	18500	20200	21000	
3	11100	15800	18000	19900	21000	
7	10200	14900	17200	19500	20800	
15	8910	13300	15600	18000	19500	
30	7530	11100	13100	15200	16400	
60	5950	8460	9690	10900	11500	
90	4940	6850	7730	8510	8930	

Duration of daily mean flow for period of record 1896-99, 1901-06, 1915-39

Discharge, in ft3/s, which was equaled or exceeded for indicated percentage of time 99.9% 5% 10% 60% 70% ጸበሂ 90% 95% 98% 99% 99.5% 1% 15% 20% 30% 40% 50% 13100 7230 4620 3420 2620 1630 1100 822 628 507 435 344 305 275 259 251 226



09217000 GREEN RIVER NEAR GREEN RIVER, WYO.

(Before construction of Fontenelle Dam)

LOCATION.--Lat 41°30'59", long 109°26'54", in NW\2NE\2NE\2 sec.26, T.18 N., R.107 W., Sweetwater County, on right bank
0.1 mi downstream from Bitter Creek, 1.0 mi southeast of town of Green River, and 4.0 mi upstream from high-water
line of Flaming Gorge Reservoir.

DRAINAGE AREA.--About 14,000 mi², of which 4,260 mi², including 3,959 mi² in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD. -- April 1951 to current year.

GAGE. -- Water-stage recorder. Altitude of gage is 6,060 ft, from topographic map.

REMARKS.--Some regulation by Fontenelle Reservoir since August 1963. Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, and diversions for irrigation of about 223,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s, September 7, 1965, gage height, 8.53 ft, caused by emergency release from Fontenelle Reservoir; minimum daily discharge, 170 ft³/s, November 16, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD. -- Maximum discharge observed, 22,200 ft³/s, June 19, 1918, at site 1.5 mi upstream.

Monthly and annual streamflow 1952-63

Magnitude and probability of annual low flow based on period of record 1953-63

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	e, in ft ce inter dance pro	val, in	years, a	nd
							tive days)	2 5 0%	5 20%	10 10%	20 5%	50 2%	100 1%
October	1310	531	726	239	0.33	3.9							
November	845	457	630	134	0.21	3.4							
December	703	288	476	119	0.25	2.6	1	273	221	195	174		
January	670	287	450	121	0.27	2.4	3	279	230	206	187		
February	868	324	547	192	0.35	2.9	7	295	251	231	216		
March	1480	482	878	297	0.34	4.7	14	325	280	258	241		
April	3420	842	1690	893	0.53	9.1	30	365	311	285	266		
May	5670	978	2940	1780	0.60	15.8	60	393	333	305	285		
June	9320	2720	5470	1990	0.36	29.4	90	423	364	338	318		
July	6180	757	2770	1540	0.55	14.9	120	464	410	387	371		
August	1800	575	1270	415	0.33	6.8	183	520	486	477	474		
September	1300	462	765	245	0.32	4.1							
Annual	2220	799	1550	474	0.31	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

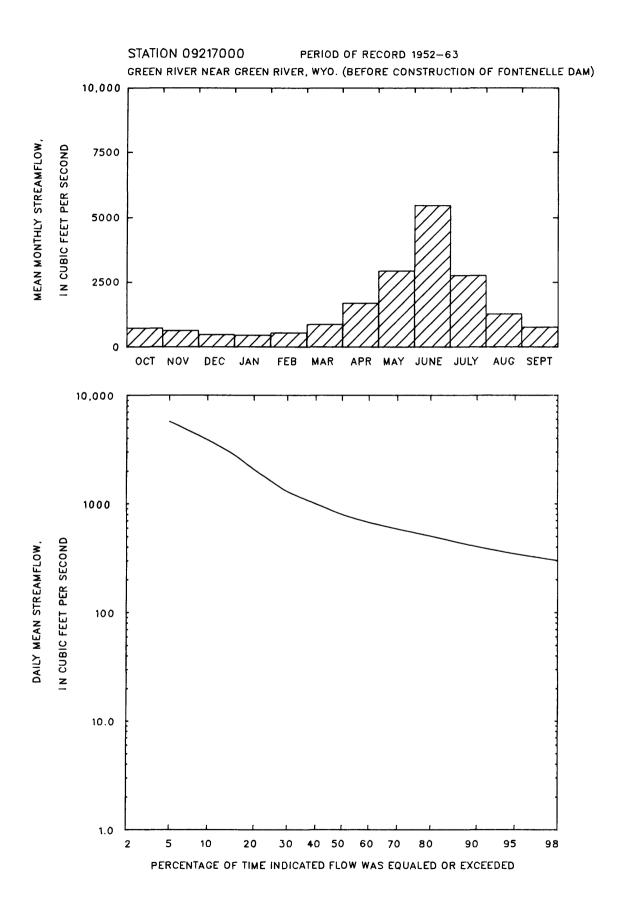
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1952-63

Period (con-		recurre	ge, in ft nce inter nce proba	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	9310	12300	13800			
3	9090	12100	13500			
7	8530	11300	12700			
15	7360	9820	11200			
3 0	5870	7950	9150			
60	4610	6270	7150			
90	3780	5220	6000			

Duration of daily mean flow for period of record 1952-63

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
10100	5690	3870	2860	2060	1280	994	791	669	584	502	402	343	299	273	254	205



09217000 GREEN RIVER NEAR GREEN RIVER, WYO.

(After construction of Fontenelle Dam)

Monthly and annual streamflow 1964-84

Magnitude and probability of annual low flow based on period of record 1965-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	3110	383	1110	605	0.55	4.9
November	1840	363 415	913	325	0.36	4.9
December	1420	282	789	297	0.38	3.5
January	1380	278	842	328	0.38	3.7
February	1980	277	944	457	0.39	4.2
March	1850	475	1110	437	0.48	4.2
	2780	516	1680	432 660	0.39	7.4
April	4820	496				
May			2590	1280	0.49	11.5
June	10500	414	5250	2390	0.46	23.3
July	8040	368	3930	2360	0.60	17.4
August	3580	372	1900	742	0.39	8.4
September	7750	548	1500	1490	0.99	6.6
Annual	3010	689	1880	574	0.30	100

Period (con-	1	recurren	e inter	³ /s, for val, in y obability	ears, ar	ad
secu- tive days)	2 50%	5 20%	10 1 0%	20 5%	50 2%	100 1%
1	401	300	258	228		
3	423	316	272	241		
7	467	347	297	261		
14	5 28	381	316	269		
30	5 94	416	337	280		
60	672	469	376	308		
90	725	497	393	318		
120	776	535	423	341		
183	896	638	5 2 2	436		

Magnitude and probability of instantaneous peak flow based on --- years of record

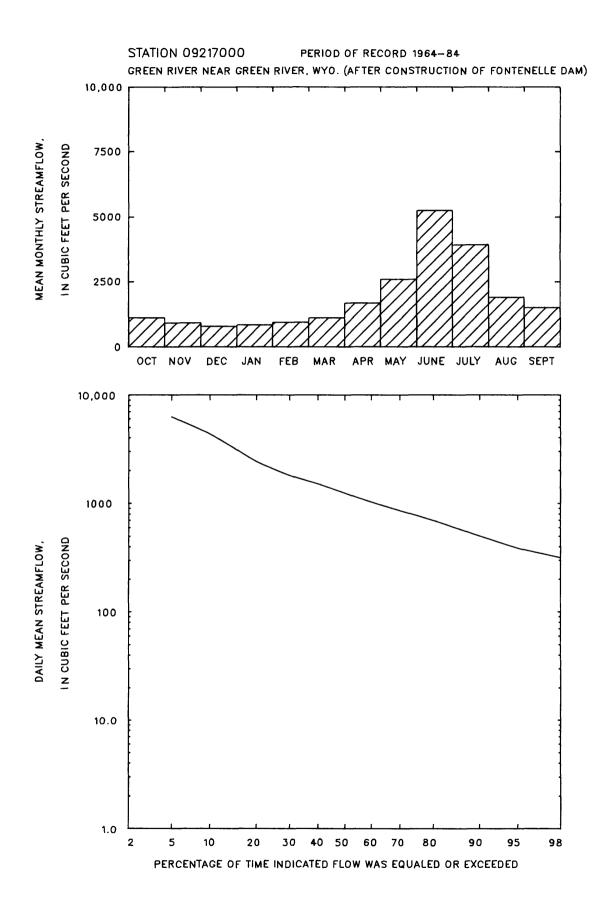
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1964-84

Period (con-		recurre	ice inte	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 5 0%	5 20%	10 10%	25 4%	50 2%	100 1%
,	7070	10000	1//00	16500		
1	7970	12200	14400	16500		
3	7820	12000	14100	16200		
7	75 0 0	11400	13300	15100		
15	6720	10000	11600	12900		
30	5 9 10	8630	9920	11100		
60	4850	7080	8210	9310		
90	4130	5820	6660	7460		

Duration of daily mean flow for period of record 1964-84

		Disc	charge,	in ft ³ ,	s, which	ch was	equaled	or exc	eeded 1	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	9 9 .5%	99.9%
10100	6240	4330	3130	2400	1780	1500	1230	1020	853	693	500	384	313	289	272	250



09217900 BLACKS FORK NEAR ROBERTSON, WYO.

LOCATION.--Lat 40°57'53", long 110°34'38", in NW2SW2 sec.27, T.3 N., R.12 E., Summit County, Utah, on left bank 1 mi downstream from East Fork, 2.5 mi south of Utah-Wyoming State line, and 17 mi south of Robertson.

DRAINAGE AREA. -- 130 mi², approximately.

PERIOD OF RECORD. --October 1937 to July 1939 (published as "at Blacks Fork Ranger Station"), July 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,804.8 ft, from levels by Bureau of Reclamation. Datums published from October 1968 to September 1978 are incorrect. October 1937 to July 1939, water-stage recorder at site 85 ft upstream at different datum.

REMARKS. -- No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,480 ft³/s June 19, 1983; maximum gage height, 4.91 ft June 6, 1968; minimum daily discharge, 5.5 ft³/s January 7, 1977.

Monthly and annual streamflow 1967-84

Magnitude and probability of annual low flow based on period of record 1968-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	e, in ft ³ ce interv dance pro	al, in y	ears, a	nd
						· · · · · · · · · · · · · · · · · · ·	tive days)	2 50%	5 20 %	10 10%	20 5 %	50 2%	100 1%
October	136	30	56	27	0.48	2.9							·
November	62	24	43	11	0.26	2.2							
December	50	11	34	9.8	0.28	1.8	1	18	12	9.5	7.5		
January	41	6.7	26	8.5	0.32	1.3	3	19	13	9.9	7.9		
February	37	9.3	24	7.5	0.32	1.2	7	20	14	11	8.4		
March	39	10	25	6.2	0.25	1.3	14	21	15	12	9.0		
April	97	19	46	22	0.47	2.4	30	22	16	13	9.9		
May	789	134	383	170	0.44	19.5	60	24	17	13	11		
June	1270	406	791	260	0.33	40.4	90	25	18	15	12		
July	1000	115	343	213	0.62	17.5	120	28	20	16	13		
August	232	57	115	54	0.47	5.9	183	34	26	22	19		
September	157	37	73	37	0.51	3.7			***				
Annual	228	79	164	40	0.24	100							

Magnitude and probability of instantaneous peak flow based on 20 years of record

	e, in ft ³ , ars, and o				
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1650	2140	2420	2730	2940	3130

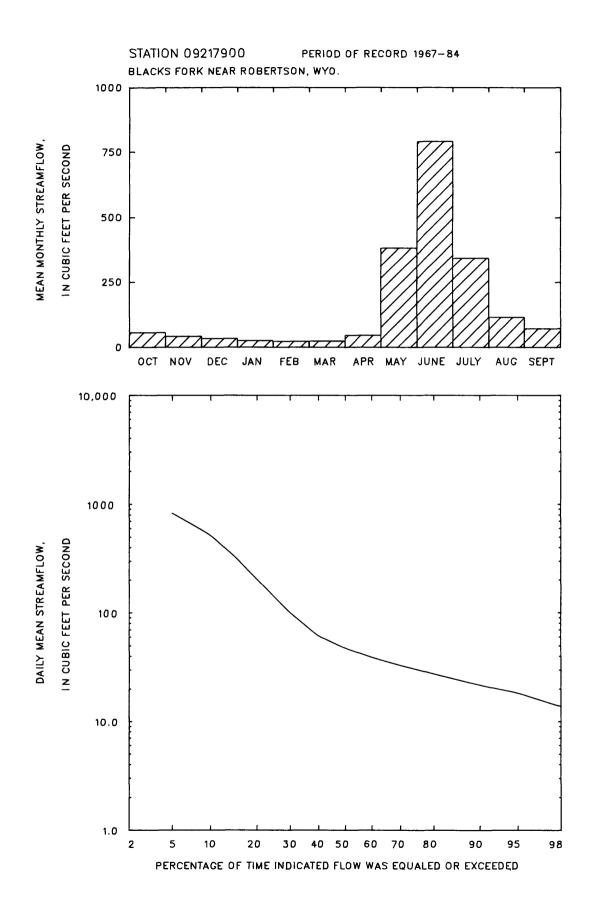
Weighted skew = -0.444

Magnitude and probability of annual high flow based on period of record 1967-84

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	and
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	1450	1770	1920	2060		
3	1350	1650	1790	1920		
7	1220	1510	1660	1820		
15	1080	1340	1480	1620		
30	907	1110	1210	1300		
60	693	848	913	968		
90	533	649	698	741		

Duration of daily mean flow for period of record 1967-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1410	822	517	316	201	98	60	47	39	33	27	21	18	14	9.8	7.6	6.1



09218500 BLACKS FORK NEAR MILLBURNE, WYO.

(Before construction of Meeks Cabin Dam.)

LOCATION.--Lat 41°01'54", long 110°34'43", in NW\2NE\2SW\2 sec.11, T.12 N., R.117 W., Uinta County, on left bank 0.4 mi downstream from Meeks Cabin Dam, 2.7 mi north of Utah-Wyoming State line, and 17 mi southwest of Millburne.

DRAINAGE AREA. -- 152 mi2.

PERIOD OF RECORD .-- July 1939 to current year. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 8,512.27 ft, from Bureau of Reclamation datum. Prior to October 1, 1971, at several sites about 2.0 mi downstream at various datums.

REMARKS. -- Flow completely regulated by Meeks Cabin Reservoir, capacity, 32,470 acre-ft, since June 1971. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,530 ft³/s, June 7, 1957, from rating curve extended above 1,500 ft³/s; maximum gage height, 6.46 ft in gage well, 6.76 ft from floodmarks, June 12, 1965, site and datum then in use; minimum daily discharge, 1.0 ft³/s, September 15-16, 1983, due to regulation by Meeks Cabin Dam.

Monthly and annual streamflow 1940-71

Magnitude and probability of annual low flow based on period of record 1941-71

	Maximum	Minimum	Mean	Stan- dard devia- tion	Coeffi- cient of vari-	Percent of annual	Period (con-		recurren	ce interv	d's, for it	ears, an	d
Month	(ft ³ /s)	(ft ³ /s)	(ft ³ /s)		ation	runoff	secu- tive	2	5	10	20	50	100
	•••						days)	50%	20%	10%	5%	2%	1%
October	108	30	51	19	0.38	2.7							
November	61	12	36	9.8	0.27	1.9					_		
December	50	18	31	7.9	0.25	1.6	1	23	15	11	7.6	4.8	
January	48	14	29	8.3	0.29	1.5	3	23	16	12	8.9	6.1	
February	57	16	29	8.3	0.29	1.5	7	25	18	14	11	7.9	
March	72	18	35	13	0.37	1.8	14	25	18	15	12	8.6	
April	297	33	85	63	0.74	4.5	30	26	19	16	13	10	
May	743	199	469	145	0.31	24.6	60	26	21	18	16	13	
June	1250	237	691	250	0.36	36.2	90	28	23	20	18	16	
July	706	66	285	153	0.54	14.9	120	29	24	22	20	18	
August	315	34	102	53	0.52	5.4	183	34	29	27	25	24	
September		32	64	33	0.51	3.3							
Annual	226	99	159	31	0.20	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

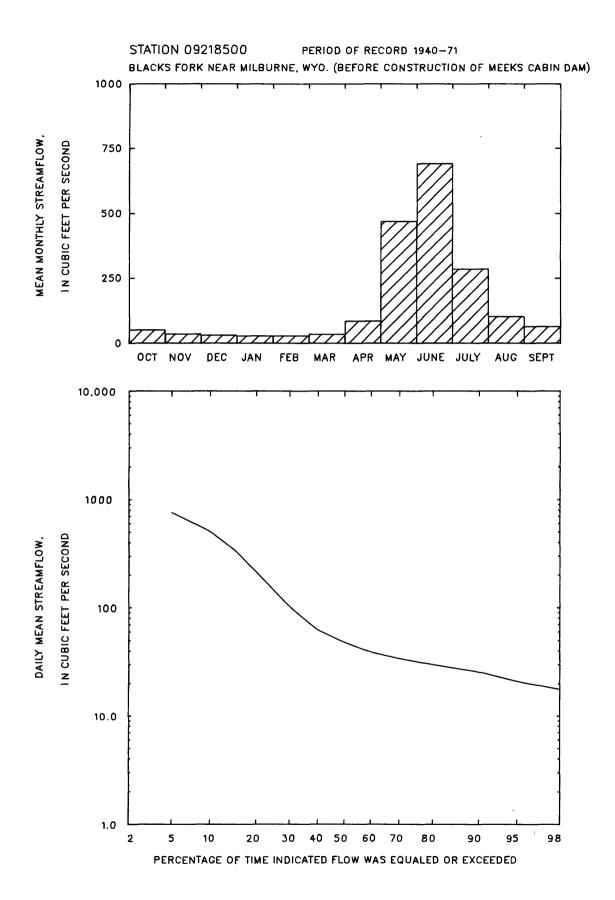
		/s, for in			e interval percent
2	5	10	25	50	100
5 0%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1940-71

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 1 0%	25 4%	50 2%	100 1%
1	1210	1530	1750	2030	2250	
3	1140	1450	1660	1930	2140	
J. 7	1050	1320	1490	1690	1840	
15	915	1150	1290	1450	1570	
30	790	988	1100	1230	1320	
60	638	762	822	881	916	
90	500	594	638	680	704	

Duration of daily mean flow for period of record 1940-71

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1180	755	506	333	212	101	62	48	39	34	30	25	21	18	16	14	7.1



09218500 BLACKS FORK NEAR MILLBURNE, WYO.

(After construction of Meeks Cabin Dam)

Monthly and annual streamflow 1972-84

Magnitude and probability of annual low flow based on period of record 1973-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu- tive
							days)
October	182	29	76	51	0.67	3.7	
November	137	13	53	42	0.80	2.6	
December	5 3	8.5	28	17	0.62	1.4	1
January	45	7.9	24	15	0.62	1.2	3
February	38	6.1	22	13	0.59	1.1	7
March	38	6.5	21	12	0.55	1.0	14
April	38	7.4	21	11	0.55	1.0	30
May	631	92	286	148	0.52	13.9	60
June	1480	464	762	257	0.34	37.0	90
July	1080	162	469	234	0.50	22.7	120
August	317	85	180	67	0.37	8.7	183
September	196	70	120	38	0.32	5.8	
Annual	281	83	172	50	0.29	100	

Period (con-		recurren	e, in ft ³ ce interv dance pro	al, in y	ears, a	ad
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	9.7	4.8	2.9	1.7		
3	9.7	5.8	4.6	3.8		
7	11	7.2	5.9	5.1		
14	11	7.4	6.0	5.1		
30	12	7.6	6.0	5.1		
60	17	9.1	6. 6	5.1		
90	17	9.6	7.0	5.4		
120	18	10	7.6	5.9		
183	30	17	13	10		

Magnitude and probability of instantaneous peak flow based on --- years of record

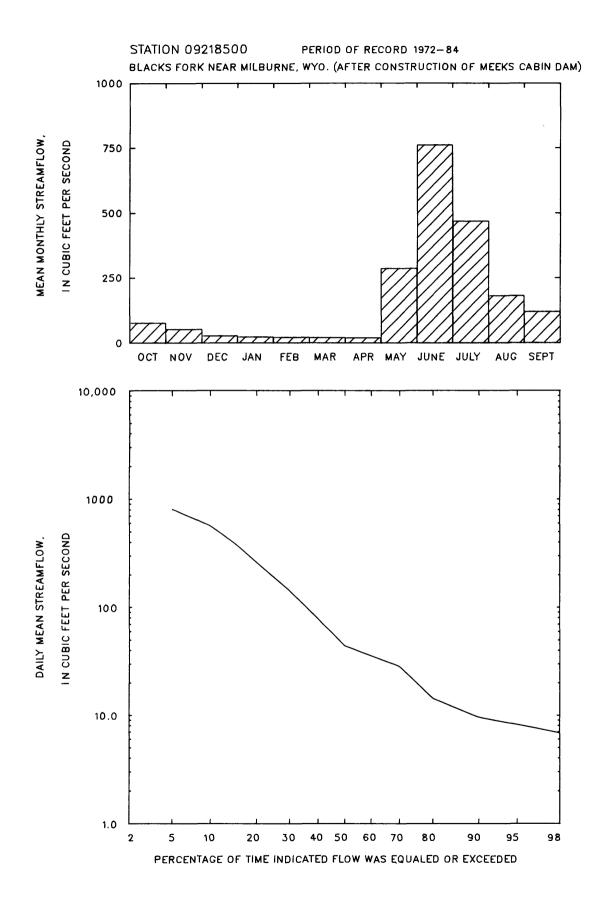
			٥.		100
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1972-84

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1150	1530	1790			
3	1110	1470	1710			
7	1060	1380	1600			
15	950	1230	1430			
30	811	1060	1230			
60	670	861	969			
90	542	684	756			

Duration of daily mean flow for period of record 1972-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1360	801	5 6 5	379	257	140	78	44	35	28	14	9.5	8.1	6.8	6.1	5.5	5.0



09219000 BLACKS FORK' NEAR URIE, WYO.

LOCATION.--Lat 41°21', long 110°20', in sec.24, T.16 N., R.115 W., Uinta County, on left bank 2 mi downstream from Quartz Creek and 2.5 mi north of Urie.

DRAINAGE AREA. -- 261 mi².

PERIOD OF RECORD.--August 1913 to September 1924, October 1937 to September 1955. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 6,560 ft, by barometer. August 21, 1913, to September 30, 1924, staff gage at former bridge on abandoned channel 800 ft upstream at different datum (datum lowered 0.50 ft August 19, 1915). October 21, 1937, to April 1, 1939, water-stage recorder on abandoned channel 500 ft upstream at different datum.

REMARKS.--Diversions above station for irrigation of about 55,000 acres, part of which is above and part below station. Four small reservoirs above station (total capacity, about 1,100 acre-ft) for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,680 ft³/s June 19, 20, 1917, gage height, 4.72 ft, site and datum then in use; minimum daily, 0.2 ft³/s September 2, 3, 1939.

Monthly and annual streamflow 1914-24, 1938-55

Magnitude	and proba	bility of annual	low flow
based on	period of	record 1915-24,	1939-55

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	45	3.4	16	12	0.75	1.7
November	56	4.1	21	14	0.67	2.2
December	57	5.1	23	13	0.56	2.4
January	46	5.0	23	10	0.44	2.5
February	52	7.5	26	10	0.40	2.7
March	122 *	12	54	29	0.53	5.7
April	295	11	98	70	0.72	10.3
May	786	18	287	214	0.75	30.3
June	1090	11	333	291	0.87	35.2
July	232	1.9	45	56	1.2	4.7
August	43	0.86	12	11	0.96	1.3
September	38	1.0	8.9	9.3	1.0	0.9
Annual	173	12	79	46	0.58	100

eriod (con- secu-	1	recurren	e, in ft ³ ce interv lance pro	al, in y	ears, an	ıd
tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100
1	2.6	1.0	0.60	0.37	0.22	
3	2.8	1.1	0.66	0.43	0.25	
7	3.2	1.4	0.87	0.59	0.38	
14	3.8	1.7	1.1	0.77	0.51	
30	4.6	2.1	1.4	0.95	0.62	
60	6.0	2.9	2.0	1.4	0.96	
90	7.9	4.0	2.8	2.0	1.4	
120	9.5	5.3	3.9	3.0	2.2	
183	14	8.0	6.0	4.7	3.5	

Magnitude and probability of instantaneous peak flow based on --- years of record

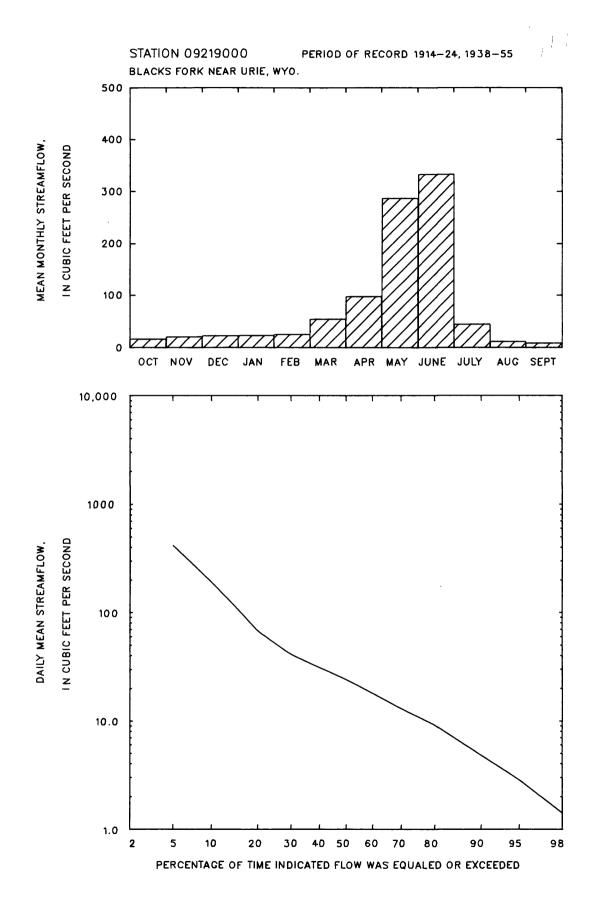
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1914-24, 1938-55

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	nd
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	896	1490	1810	2130	2310	
3	810	1360	1640	1900	2040	
7	694	1200	1460	1700	1830	
15	548	984	1230	1470	1620	
30	402	747	962	1200	1350	
60	279	523	681	862	981	
90	213	388	500	628	713	

Duration of daily mean flow for period of record 1914-24, 1938-55

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
962	413	191	108	67	41	31	24	18	13	9.1	4.8	2.8	1.4	0.92	0.68	0.31



09220000 EAST FORK OF SMITHS FORK NEAR ROBERTSON, WYO.

LOCATION.--Lat 41°03'15", long 110°23'52", in NE\NW\NE\ sec.5, T.12 N., R.115 W., Uinta County, Wasatch National Forest, on left bank 60 ft downstream from bridge, 1.0 mi upstream from Gilbert Creek, 6.1 mi downstream from State Line Reservoir, and 9.0 mi south of Robertson.

DRAINAGE AREA. -- 53.0 mi².

PERIOD OF RECORD.--July 1939 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313. Prior to October 1, 1978, published as East Fork of Smith Fork near Robertson.

GAGE.--Water-stage recorder. Altitude of gage is 8,470 ft, from topographic map. Prior to July 12, 1957, at datum 3.96 ft higher.

REMARKS.--Flow completely regulated by State Line Reservoir, 6.1 mi upstream, total capacity, 14,000 acre-ft, dead - storage is about 2,000 acre-ft, since May 1979.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by the Geological Survey. EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft³/s, June 10, 1965, gage height, 6.75 ft; no flow part of each day April 17-22, 24-25, 1950; minimum gage height, 3.26 ft, present datum, April 22, 1950.

Monthly and annual streamflow 1940-71

Magnitude and probability of annual low flow based on period of record 1941-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	35	5.2	16	7.0	0.44	2.8
November	19	5.5	11	3.5	0.32	1.9
December	17	2.1	8.1	3.2	0.39	1.4
January	16	1.3	7.1	2.9	0.40	1.3
February	13	1.5	7.2	2.5	0.35	1.3
March	15	2.1	8.0	3.1	0.38	1.4
April	90	5.0	20	18	0.90	3.6
May	201	32	126	39	0.31	22.4
June	430	59	216	97	0.45	38.3
July	269	16	91	50	0.56	16.0
August	120	6.6	34	20	0.58	6.1
September	60	6.7	20	11	0.56	3.5
Annua l	89	25	47	13	0.28	100

based on period of record 1941-71

Period (con-	1	recurren	cé interv	³ /s, for val, in y obability	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	5.5	3.7	2.8	2.1	1.5	
3	5.6	3.8	2.8	2.2	1.5	
7	5.9	3.9	2.9	2.2	1.5	
14	6.2	4.1	3.0	2.3	1.5	
30	6.5	4.4	3.3	2.5	1.7	
60	7.1	4.8	3.6	2.8	1.9	
90	7.4	5.0	3.8	2.9	2.1	
120	7.7	5.4	4.3	3.4	2.5	
183	9.4	7.1	6.1	5.4	4.6	

Magnitude and probability of instantaneous peak flow based on 45 years of record

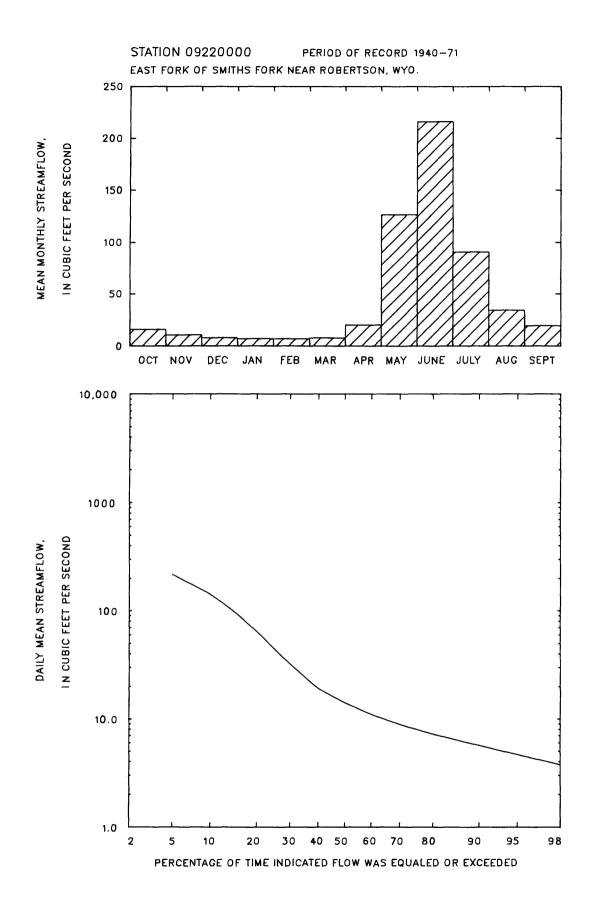
Discharge, in ft3/s, for indicated recurrence interval in years, and exceedance probability, in percent 10 100 50 20% 10% 4% 50% 2% 1% 505 746 926 1180 1380 1600 Weighted skew = 0.283

Magnitude and probability of annual high flow based on period of record 1940-71

Period (con-		recurre	nce inte	rval, in	r indicat years, a in perce	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	390	567	707	911	1090	
3	363	522	640	807	943	
7	325	465	566	705	816	
15	279	385	455	544	610	
30	236	315	364	421	461	
60	183	238	271	309	335	
90	143	185	211	241	262	

Duration of daily mean flow for period of record 1940-71

		Dis	charge,	in ft3	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9
389	217	143	95	64	32	19	14	11	8.9	7.2	5.6	4.6	3.7	2.9	1.6	1.1



09220500 WEST FORK OF SMITHS FORK NEAR ROBERTSON, WYO.

LOCATION.--Lat 41°01'20", long 110°28'43", in SElNELNWL sec.15, T.12 N., R.115 W., Uinta County, Wasatch National Forest, on left bank 0.8 mi downstream from Archie Creek and 11.6 mi southwest of Robertson.

DRATNAGE AREA .-- 37.2 mi2

PERIOD OF RECORD. -- July 1939 to September 1981. No winter records since 1971. Monthly discharge only for some periods; published in WSP 1313. Prior to October 1, 1978, published as West Fork of Smith Fork near Robertson.

GAGE.--Water-stage recorder. Datum of gage is 8,651.0 ft. July 13, 1939, to August 16, 1949, at site 75 ft upstream at datum 2.00 ft higher; August 17, 1949, to June 13, 1965, at present site at datum 2.00 ft higher.

REMARKS .-- No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s June 10, 1965, gage height, 5.20 ft, in gage well, 5.60 ft, from floodmarks, present datum; minimum discharge, 0.2 ft³/s August 13, 1940, February 25, 1941 (discharge measurement).

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1940-71

Magnitude and probability of annual low flow based on period of record 1941-71

Month	Maximum (ft³/s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	1	Discharge recurrence on-exceed	e interv	al, in y	ears, ar	ıd
	(10 /8)	(10 /8)	(10 /8)	(10 /8)	ac1011		tive days)	2 50%	5 2 0%	10 10%	20 5%	50 2%	100 1%
October	12	1.4	4.0	2.4	0.60	1.6							
November	6.3	1.4	3.3	1.2	0.37	1.3							
December	5.4	0.60	2.8	1.2	0.43	1.1	1	1.2	0.63	0.43	0.30	0.19	
January	5.0	0.40	2.6	1.2	0.47	1.0	3	1.3	0.68	0.47	0.33	0.22	
February	5.6	0.52	2.6	1.2	0.46	1.0	7	1.4	0.76	0.53	0.38	0.26	
March	7.8	1.2	3.4	1.7	0.48	1.3	14	1.5	0.85	0.59	0.43	0.29	
April	75	3.2	18	16	0.90	6.8	30	1.8	1.0	0.74	0.55	0.39	
May	153	47	109	31	0.29	42.3	60	2.0	1.2	0.91	0.69	0.50	
June	407	12	89	76	0.84	34.8	90	2.3	1.5	1.2	0.94	0.73	
July	72	1.9	14	13	0.87	5.6	120	2.5	1.7	1.4	1.2	0.96	
August	23	0.61	5.2	4.4	0.85	2.0	183	2.7	2.0	1.7	1.5	1.3	
September	16	0.62	3.1	2.7	0.87	1.2							
Annual	55	8.8	22	8.0	0.37	100							

Magnitude and probability of instantaneous peak flow based on 42 years of record

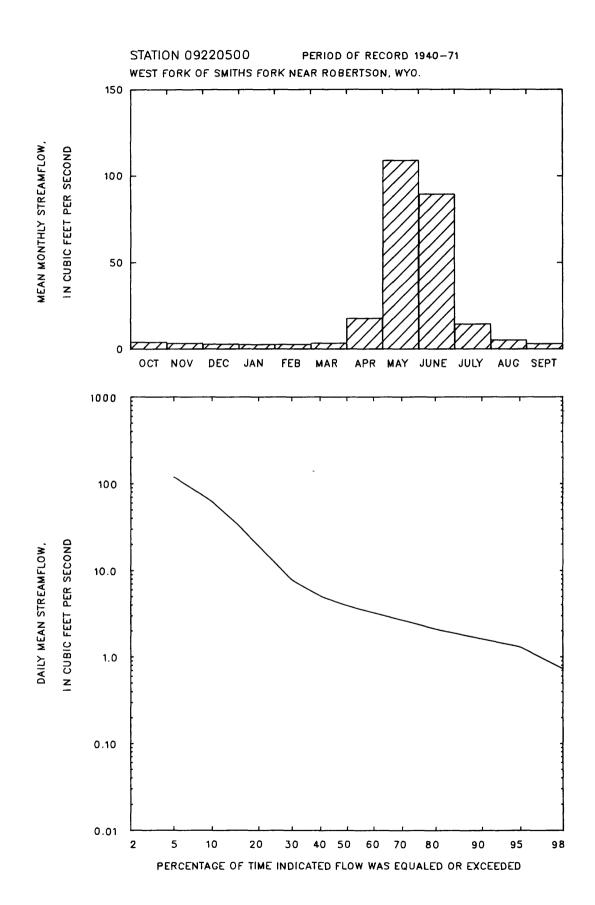
Discharge, in ft3/s, for indicated recurrence interval in years, and exceedance probability, in percent 100 10 25 50 20% 2% 50% 10% 4% 1% 443 706 905 1190 1420 1660 Weighted skew = 0.115

Magnitude and probability of annual high flow based on period of record 1940-71

Period (con-		recurre	nce inter	rval, in	r indicat years, a in perce	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	264	430	583	838	1080	
3	254	388	495	652	785	
7	225	328	404	507	589	
15	181	260	315	387	444	
30	141	196	232	277	311	
60	98	133	155	183	202	
90	71	96	112	132	146	

Duration of daily mean flow for period of record 1940-71

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercent	age of	time		
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
264	118	62	33	19	7.7	4.9	3.9	3.2	2.6	2.1	1.6	1.3	0.72	0.58	0.43	0.31



09221500 SMITHS FORK AT MOUNTAINVIEW, WYO.

LOCATION.--Lat 41°16', long 110°20', in sec. 23 T.15 N., R.115 W., Uinta County, on right bank just downstream from highway bridge in southwestern edge of Mountainview.

DRAINAGE AREA. -- 192 mi2.

PERIOD OF RECORD. ---May 1941 to December 1957. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 6,830 ft, by barometer. Prior to August 1, 1941, at site 150 ft downstream at different datum.

REMARKS.--Diversions above station for irrigation of about 17,800 acres, part of which is above and part below station. One small reservoir (capacity, about 300 acres-ft) for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft³/s June 13, 1953, maximum gage height, 4.56 ft June 9, 1957; minimum daily discharge, 2.5 ft³/s August 30, 1948.

Monthly and annual streamflow 1942-57

Magnitude and probability of annual low flow based on period of record 1943-57

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		Discharg recurren	cé inter	val, in	years, a	nd
		<u> </u>					tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	35	4.4	15	9.0	0.59	2.4							
November	33	5.9	18	7.9	0.44	2.8							
December	29	10	18	5.8	0.32	2.9	1	5.0	3.6	3.0	2.5		
January	30	11	19	5.7	0.30	3.0	3	5.4	4.0	3.4	2.9		
February	27	12	20	4.8	0.24	3.1	7	6.1	4.6	4.0	3.5		
March	41	15	27	7.5	0.28	4.3	14	6.7	5.2	4.5	4.0		
April	186	25	71	44	0.61	11.3	30	7.7	6.0	5.2	4.6		
May	535	36	19 9	119	0.60	31.7	60	9.3	6.9	5.9	5.1		
June	500	19	190	135	0.71	30.1	90	10	7.5	6.4	5.7		
July	51	12	28	14	0.50	4.5	120	12	8.8	7.6	6.8		
August	33	6.6	16	8.6	0.55	2.5	183	14	11	9.6	8.7		
September	14	5.2	9.4	3.1	0.33	1.5							
Annua l	107	18	53	20	0.39	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

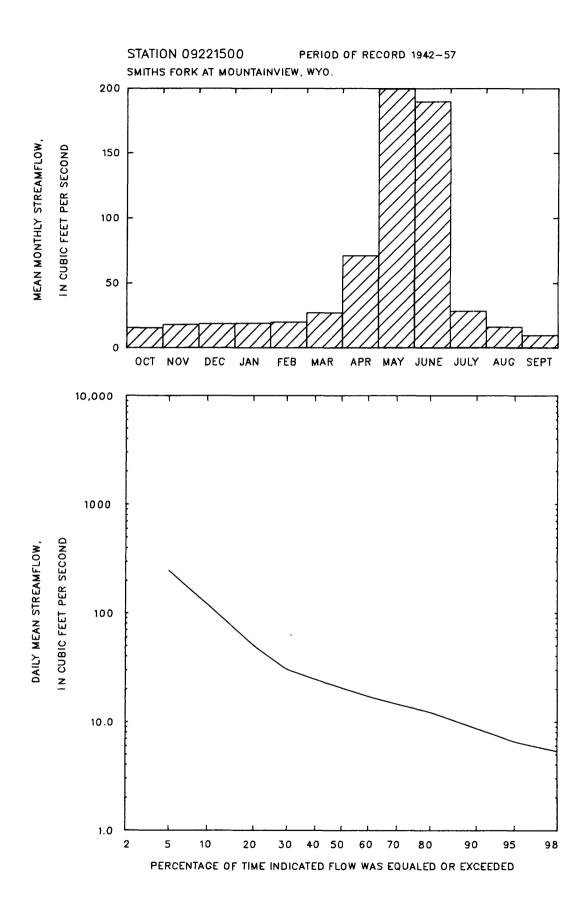
		/s, for in			e interval percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1942-57

Period (con-		recurre	nce inter	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	563	834	961	1070		
3	502	775	910	1030		
7	443	686	795	884		
15	361	563	653	726		
30	287	432	495	545		
60	211	308	347	377		
90	159	227	256	279		

Duration of daily mean flow for period of record 1942-57

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	.cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
5 75	246	121	74	50	30	2 5	20	17	15	12	8.6	6.5	5.3	4.6	3.9	3.0



09222000 BLACKS FORK NEAR LYMAN, WYO.

(Before construction of Meeks Cabin Dam)

LOCATION. -- Lat 41°27'08", long 110°10'20", in SWANWASWA sec.15, T.17 N., R.113 W., Uinta County, on left bank 200 ft downstream from bridge on old U. S. Highway 30S, 8.5 mi downstream from Smiths Fork, and 11 mi northeast of Lyman. DRAINAGE AREA. -- 821 mi2.

PERIOD OF RECORD. --October 1937 to December 1957, May 1962 to September 1983. Monthly discharge only for some periods; published in WSP 1313.

GAGE .-- Water-stage recorder. Altitude of gage is 6,380 ft, from topographic map. October 21, 1937, to December 31, 1957, at site 300 ft downstream, at datum 1.51 ft higher.

REMARKS. -- Natural flow of stream affected by regulation from Meeks Cabin Reservoir, capacity, 32,470 acre-ft, since June 1971, from State Line Reservoir, capacity, 14,000 acre-ft, since April 1980, several smaller reservoirs, and diversions for irrigation of about 62,200 acres above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 7,960 ft³/s, June 11, 1965, gage height, 12.68 ft; no flow August 8, 15-22, 1940, December 26-28, 1962.

Monthly and annual streamflow 1938-57, 1963-71

Magnitude and probability of annual low flow based on period of record 1939-57, 1964-71

in percent

100

1%

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		recurrer	ge, in ft ³ ace interv dance pro	al, in ye	ears, and	d
	(20 / 8)	(20 / 5)	(20 / 5)	(10 / 0)	ucton .		tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	
October	199	4.3	40	42	1.0	2.3							
November	140	7.1	42	30	0.71	2.4							
December	122	7.9	40	27	0.66	2.3	1	5.3	1.4	0.39	0.00	0.00	
January	13 9	2.9	44	2 9	0.65	2.5	3	5.7	1.6	0.45	0.00	0.00	
February	91	11	51	22	0.44	2.9	7	6.4	1.8	0.51	0.00	0.00	
March	243	22	97	55	0.57	5.5	14	7.2	2.3	1.2	0.71	0.36	
April	632	38	195	147	0.76	11.1	30	9.1	3.2	1.8	1.1	0.62	
May	1210	40	443	265	0.60	25.3	60	13	5.3	3.3	2.2	1.4	,
June	2010	30	605	461	0.76	34.6	90	18	8.0	5.2	3.6	2.3	
July	718	5.5	124	139	1.1	7.1	120	23	11	7.5	5.4	3.6	
August	351	0.96	46	69	1.5	2.6	183	29	15	11	7.7	5.4	
September	237	2.0	25	43	1.7	1.4							
Annual	379	29	146	75	0.52	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

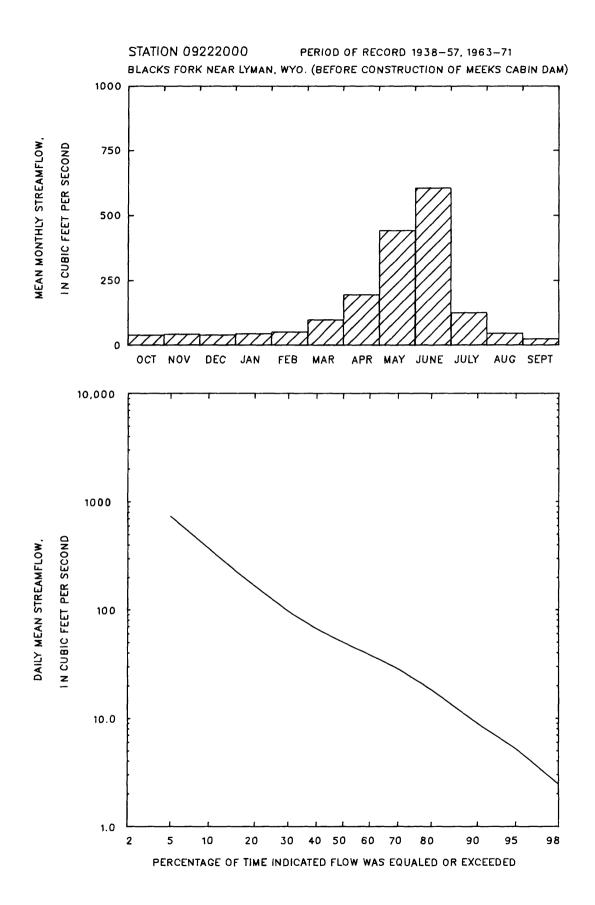
		/s, for in exceedance			e interval percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1938-57, 1963-71

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1520	2520	3180	3990	4570	
3	1380	2250	2720	3200	3480	
7	1170	1870	2220	2530	2700	
15	93 5	1480	1750	1990	2120	
30	731	1170	1390	1600	1710	
60	525	847	1020	1180	1270	
90	413	656	784	911	983	

Duration of daily mean flow for period of record 1938-57, 1963-71

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1440	730	370	234	167	96	66	50	38	29	18	8.9	5.2	2.4	1.4	1.0	0.09



09222000 BLACKS FORK NEAR LYMAN, WYO.

(After construction of Meeks Cabin Dam)

Monthly and annual streamflow 1972-83

Magnitude and probability of annual low flow based on period of record 1973-83

Month	Maximum (ft³/s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runofi
October	301	6.2	64	83	1.3	3.4
November	218	13	70	68	0.97	3.7
December	104	14	47	34	0.74	2.5
January	82	10	41	27	0.67	2.2
February	108	18	63	31	0.49	3.4
March	353	32	153	101	0.66	8.1
April	716	44	205	190	0.93	10.8
May	771	12	328	247	0.75	17.3
June	2230	25	562	606	1.1	29.7
Jul y	1030	14	219	295	1.3	11.6
August	372	11	76	102	1.3	4.0
September	323	4.0	65	94	1.5	3.4
Annual	449	18	158	117	0.74	100

Period (con-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent										
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%					
1	12	5.3	3.4	2.3							
3	12	5.6	3.5	2.4							
7	13	5.9	3.8	2.6							
14	15	7.1	4.8	3.5							
30	18	8.3	5.6	3.9							
60	21	10	6.9	5.2							
90	24	12	8.6	6.6							
120	27	13	9.5	7.3							
183	31	15	11	8.4							

Magnitude and probability of instantaneous peak flow based on --- years of record

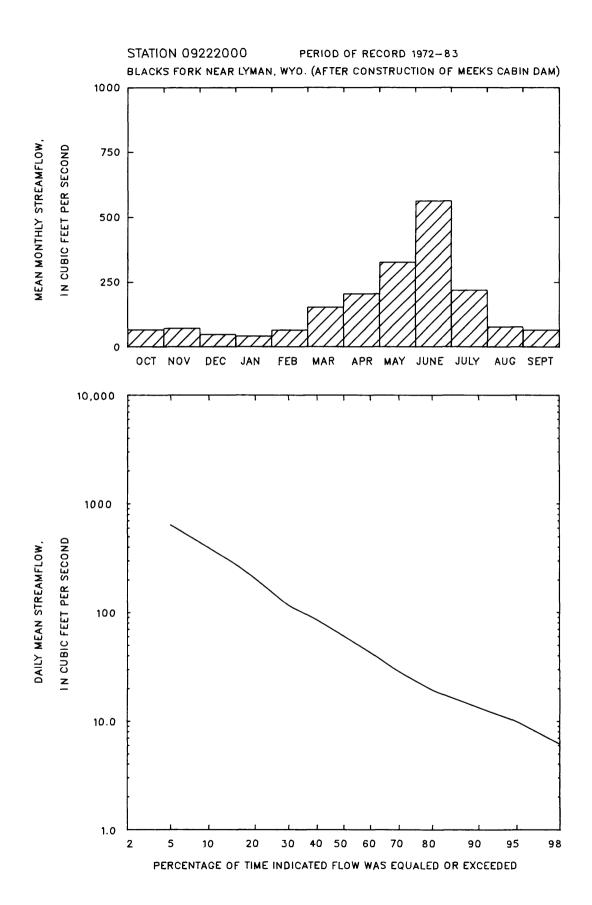
		/s, for in			
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1972-83

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	and
secu- tíve	2	5	10	25	50	100
d ay s)	50%	20%	10%	4%	2%	1%
1	1220	2450	3200			
3	1070	2150	2840			
7	864	1770	2390			
15	651	1400	1960			
30	518	1140	1640			
60	403	861	1200			
90	337	681	914			

Duration of daily mean flow for period of record 1972-83

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1670	638	391	280	204	115	84	60	43	28	19	13	9.9	6.1	4.0	3.5	2.5



09223000 HAMS FORK BELOW POLE CREEK, NEAR FRONTIER, WYO.

LOCATION.--Lat 42°06'38", long 110°42'32", in NE\SE\NW\ sec.35, T.25 N., R.117 W., Lincoln County, on left bank 2.0 mi downstream from Pole Creek, 4.6 mi upstream from Taylor Creek, and 22 mi northwest of Frontier.

DRAINAGE AREA. -- 128 mi2.

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1970, published as "near Elk Creek ranger station."

GAGE.--Water-stage recorder. Altitude of gage is 7,455 ft, from topographic map. October 1952 to September 2, 1971, at site 270 ft upstream at present datum, September 3, 1971, to July 30, 1980, at site 150 ft upstream at present datum.

REMARKS .-- No diversion above station.

EXTREMES FOR PERIOD OF RECORD. --Maximum discharge, 1,580 ft³/s, May 31, 1984, gage height, 7.28 ft; maximum gage height, 8.10 ft, May 28, 1971, site then in use; minimum daily, 0.10 ft³/s, August 17, 1977.

Monthly and annual streamflow 1953-84

Magnitude and probability of annual low flow based on period of record 1954-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
0-1-1	E /	10	20	7.0	0.05	1.0
October	54	12	22	7.8	0.35	1.8
November	34	9.4	20	5.6	0.28	1.6
December	28	9.5	16	4.3	0.26	1.3
January	26	6.2	15	4.5	0.31	1.2
February	2 9	5.6	15	4.9	0.32	1.2
March	38	6.8	20	6.5	0.33	1.6
April	398	20	99	77	0.78	7.9
May	970	41	452	203	0.45	36.1
June	913	24	431	234	0.54	34.4
July	296	9.3	108	71	0.65	8.6
August	64	7.6	32	14	0.45	2.5
September		8.3	22	9.9	0.44	1.8
Annual	214	18	105	42	0.40	100

Period (con-	1	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent									
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%					
1											
3											
7	12	7.3	4.5	2.7	1.3						
14	12	7.7	5.7	4.2	2.9						
30	13	9.1	7.4	6.1	4.9						
60	14	10	8.5	7.2	5.9						
90	15	11	9.3	8.0	6.7						
120	15	12	11	9.5	8.4						
183	17	14	13	12	11						

Magnitude and probability of instantaneous peak flow based on 32 years of record

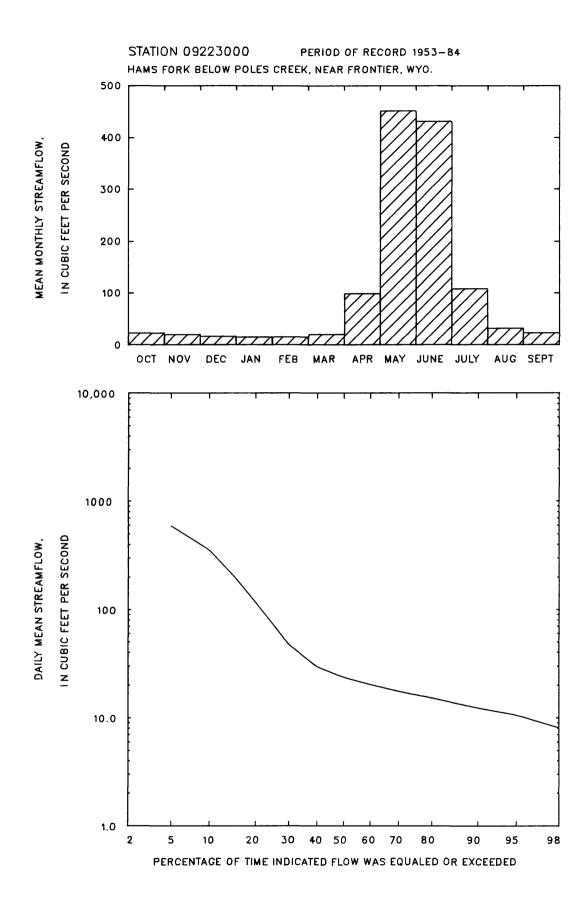
	e, in ft ³ , ars, and				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
862	1180	1360	1540	1660	1760

Magnitude and probability of annual high flow based on period of record 1953-84

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	nd
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	919	1110	1130	1140	1140	
3	873	1060	1080	1090	1090	
7	811	989	1020	1030	1030	
15	729	917	955	970	973	
30	629	818	865	888	894	
60	486	645	692	718	727	
90	370	493	531	555	563	

Duration of daily mean flow for period of record 1953-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
990	585	355	198	117	47	29	23	20	17	15	12	11	8.0	6.2	4.8	2.9



09223500 HAMS FORK NEAR FRONTIER, WYO.

(Before construction of Viva Naughton Dam)

LOCATION.--Lat 41°51'26", long 110°33'45", in lot 39, NE\SE\sec.27, T.22 N., R.116 W., Lincoln County, on right bank 800 ft upstream from highway bridge, 1.5 miles upstream from Willow Creek, and 3.5 mi northeast of Frontier.

DRAINAGE AREA.--298 mi².

PERIOD OF RECORD. -- May 1945 to October 1971, April to September 1972.

GAGE.--Water-stage recorder. Altitude of gage is 6,970 ft, by barometer. May 8 to July 23, 1945, non-recording gage at highway bridge 800 ft downstream at same datum.

REMARKS.--Flow regulated by Lake Viva Naughton (capacity, 42,400 acre-ft) since May 1961 and Kemmerer Reservoir (capacity, 1,058 acre-ft). Diversions above station for irrigation of about 5,050 acres, of which about 90 acres are below station. Water is pumped from river just upstream from station for use at Naughton powerplant.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,450 ft³/s May 19, 1950, gage height, 6.74 ft; minimum daily, 3.6 ft³/s April 26, 1961.

Mean monthly and annual streamflows 1946-60

Magnitude and probability of annual low flow based on period of record 1947-60

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	41	13	24	9.0	0.38	1.3
November	47	10	26	8.7	0.34	1.4
December	36	15	24	6.8	0.28	1.3
January	33	12	21	5.7	0.28	1.1
February	35	11	21	6.8	0.32	1.2
March	107	13	41	24	0.59	2.2
April	783	80	340	201	0.59	18.6
May	1160	298	736	301	0.41	40.1
June	1060	156	462	226	0.49	25.2
July	272	18	82	65	0.79	4.4
August	84	13	36	24	0.68	1.9
September	40	9.7	21	9.2	0.43	1.2
Annual	271	81	153	56	0.37	100

Period (con-	r	ischarge ecurrenc n-exceed	e interv	al, in y	ears, a	ad
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	9.6	6.2	4.8	3.9		
3	9.8	6.4	5.2	4.4		
7	11	7.1	5.7	4.8		
14	12	7.7	6.2	5.2		
30	14	10	8.6	7.6		
60	16	13	11	10		
90	18	15	13	12		
120	19	16	14	13		
183	21	17	16	14		

Magnitude and probability of instantaneous peak flow based on --- years of record

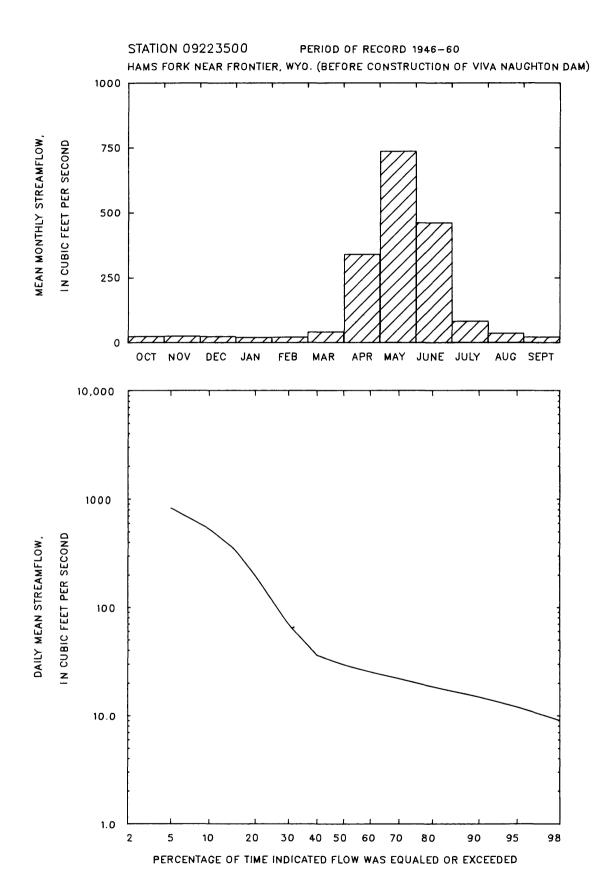
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
	2010	10 %			- 70

Magnitude and probability of annual high flow based on period of record 1946-60

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1150	1630	1910	2240		
3	1120	1580	1840	2150		
7	1050	1470	1710	1970		
15	932	1350	1610	1910		
30	791	1140	1360	1620		
60	652	890	1030	1190		
90	499	687	806	952		

Duration table of daily mean flow for period of record 1946-60

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded 1	for indi	cated p	ercenta	ge of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1400	822	531	342	196	69	36	29	25	22	18	15	12	9.0	7.1	6.0	4.4



09223500 HAMS FORK NEAR FRONTIER, WYO.

(After construction of Viva Naughton Dam)

Monthly and annual streamflow 1961-71

Magnitude and probability of annual low flow based on period of record 1962-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	51	12	23	11	0.48	1.4
November	38	9.5	21	8.8	0.42	1.3
December	41	10	20	9.1	0.47	1.2
January	32	12	18	6.5	0.35	1.1
February	35	10	23	8.9	0.39	1.4
March	68	14	36	19	0.54	2.2
April	565	31	240	205	0.85	14.5
May	1480	102	598	384	0.64	36.2
June	1030	74	484	302	0.62	29.3
July	225	35	114	63	0.55	6.9
August	93	14	42	24	0.56	2.5
September	82	11	34	21	0.61	2.1
Annual	302	34	138	74	0.53	100

Period (con-		Discharge recurrenc on-exceed	e interv	al, in y	ears, a	nd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100
1	10	6.2	4.7	3.8		
3	11	6.9	5.4	4.4		
7	12	8.2	6.9	6.0		
14	13	9.4	8.1	7.1		
30	14	10	9.0	7.9		
60	15	11	9.6	8.5		
90	16	12	10	9.1		
120	17	13	11	9.8		
183	19	15	13	12		

Magnitude and probability of instantaneous peak flow based on --- years of record

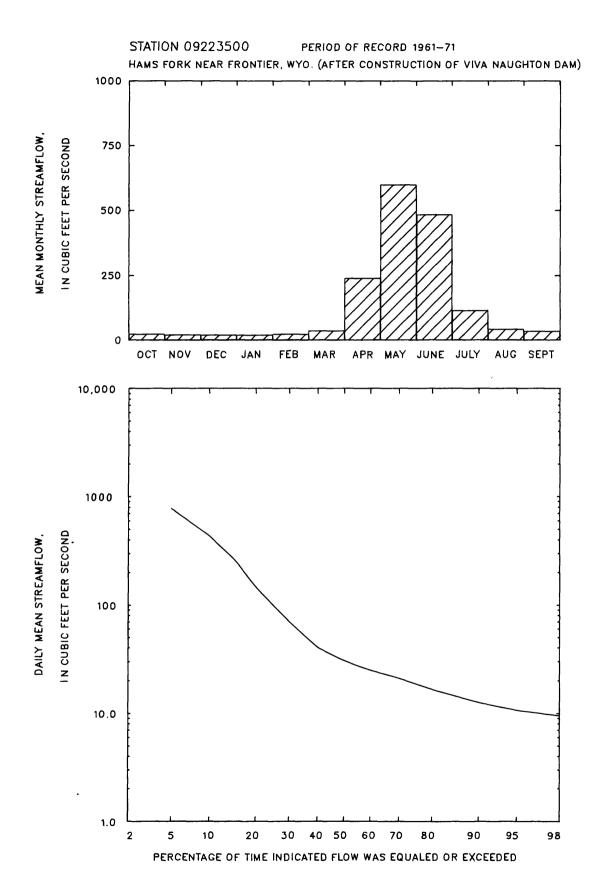
		exceedance			e interva percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1961-71

Period (con- secu-			ge, in f ce inter ce proba	val, in	years, a	and
tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	1090	1490	1680			
3	1070	1470	1620			
7	994	1390	1540			
15	846	1260	1430			
30	725	1100	1260			
60	564	885	1040			
90	432	697	841			

Duration of daily mean flow for period of record 1961-71

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1320	775	435	258	146	70	40	30	25	21	17	13	11	9.4	8.4	7.9	5.9



09224000 HAMS FORK AT DIAMONDVILLE, WYO.

LOCATION.--Lat 41°47', long 110°32', in SW% sec.24 T.21 N., R.116 W., Lincoln County, at highway bridge at Diamondville and 4 mi downstream from Willow Creek.

DRAINAGE AREA. -- 386 mi2.

PERIOD OF RECORD. --October 1917 to February 1933, June 1945 to September 1949. Pubished as "at Kemmerer", 1918.

GAGE.--Staff gage after October 1, 1918. Altitude of gage is 6,870 ft, estimated from known elevation nearby. October 1, 1918, to September 30, 1926, at datum 0.51 ft higher, and October 1, 1926, to February 28, 1933, at datum 1 ft higher. May 2 to September 23, 1918, chain gage 1 mi upstream at different datum.

REMARKS. -- Adjudicated diversions above stations for irrigation of 8,450 acres above and below station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 3,250 ft3/s May 11, 1923, from rating curve extended above 1,800 ft3/s; maximum gage height, 5.60 ft May 20, 1948; no flow on several days in 1919 and 1931.

Monthly and annual streamflow 1918-32, 1946-49

Magnitude and probability of annual low flow based on period of record 1919-32, 1947-49

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		Discharge recurrence on-exceed	e interv	al, in y	ears, a	nd
							tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	9 6	12	36	17	0.49	1.8							
November	64	10	31	11	0.35	1.6							
December	41	8.0	26	7.8	0.31	1.3	1	9.8	0.00	0.00	0.00		
January	42	10	22	7.8	0.35	1.1	3	11	0.00	0.00	0.00		
February	30	12	22	5.3	0.24	1.1	7	13	3.1	0.00	0.00		
March	116	12	44	29	0.66	2.3	14	14	4.6	0.00	0.00		
April	796	113	312	186	0.60	16.0	30	15	7.5	0.00	0.00		
May	1630	131	857	398	0.46	44.0	60	17	9.9	6.6	4.4		
June	1060	46	458	263	0.57	23.5	90	19	12	8.5	6.2		
July	203	6.9	81	52	0.65	4.1	120	21	14	11	8.3		
August	90	4.7	33	20	0.59	1.7	183	26	18	14	11		
September	51	0.57	26	13	0.51	1.3							
Annual	278	35	163	57	0.35	100							

					-	
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	9.8	0.00	0.00	0.00		
3	11	0.00	0.00	0.00		
7	13	3.1	0.00	0.00		
14	14	4.6	0.00	0.00		
30	15	7.5	0.00	0.00		
60	17	9.9	6.6	4.4		
90	19	12	8.5	6.2		
120	2.1	1 /	11	0 2		

Magnitude and probability of instantaneous peak flow based on 18 years of record

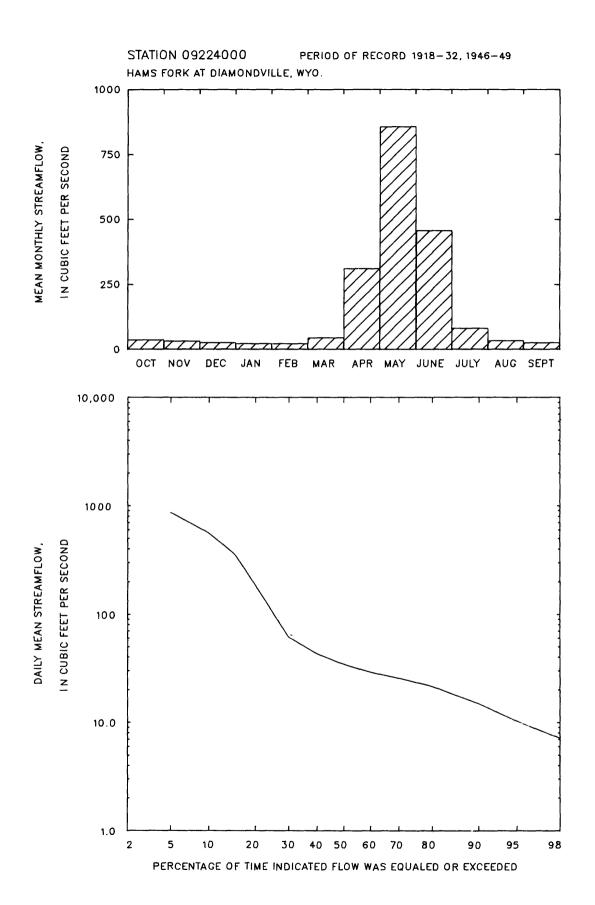
	e, in ft ³ , ars, and o				
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1460	2230	2720	3300	3710	4090

Magnitude and probability of annual high flow based on period of record 1918-32, 1946-49

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1430	2150	2520	2880		
3	1340	1990	2300	2600		
7	1210	1770	2040	2270		
15	1080	1550	1750	1920		
30	953	1320	1470	1580		
60	769	1020	1110	1170		
90	591	762	815	848		

Duration of daily mean flow for period of record 1918-32, 1946-49

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	c at ed p	ercenta	ge of t	.ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1500	859	556	35 6	185	61	43	34	29	25	21	15	10	7.1	3.9	0.86	0.17



09224700 BLACKS FORK NEAR LITTLE AMERICA, WYO.

LOCATION.--Lat 41°32'46", long 109°41'34", in NE½NE½NE½ sec.15, T.18 N., R.109 W., Sweetwater County, on right bank 200 ft upstream from bridge on U.S. Highway 30, 4.2 mi upstream from Meadow Springs Wash, and 8.5 mi east of Little America.

DRAINAGE AREA.--3,100 mi², approximately.

PERIOD OF RECORD. -- June 1962 to current year.

GAGE. -- Water-stage recorder. Datum of gage is 6,127.66 ft.

REMARKS.--Natural flow of stream affected by regulation from Meeks Cabin Reservoir, capacity, 32,470 acre-ft, since
June 1971 from State Line Reservoir, capacity, 14,000 acre-ft, since April 1980, numerous smaller reservoirs, and
diversions for irrigation of about 76,100 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,980 ft³/s, June 13, 1965, gage height, 10.90 ft; no flow September 20-26, 1962.

Monthly and annual streamflow 1972-84

Magnitude and probability of annual low flow based on period of record 1973-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	376	7.1	113	114	1.0	2.4
November	336	16	126	107	0.85	2.7
December	230	23	92	67	0.72	2.0
January	279	18	82	72	0.88	1.8
February	318	28	116	71	0.61	2.5
March	765	68	364	213	0.59	7.8
April	1310	90	585	365	0.62	12.6
May	2920	21	1260	755	0.60	27.1
June	4570	14	1230	1180	0.96	26.5
July	1350	4.4	409	400	0.98	8.8
August	542	9.5	155	167	1.1	3.3
September	576	4.6	126	169	1.3	2.7
Annual	888	29	389	239	0.61	100

Period (con-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent											
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100						
1	15	1.9	0.52	0.16								
3	16	2.3	0.69	0.23								
7	18	3.0	1.0	0.38								
14	21	4.4	1.7	0.72								
30	29	9.0	4.7	2.7								
60	37	12	6.9	4.2								
90	47	17	10	6.4								
120	56	22	13	8.6								
183	62	27	18	13								

Magnitude and probability of instantaneous peak flow based on --- years of record

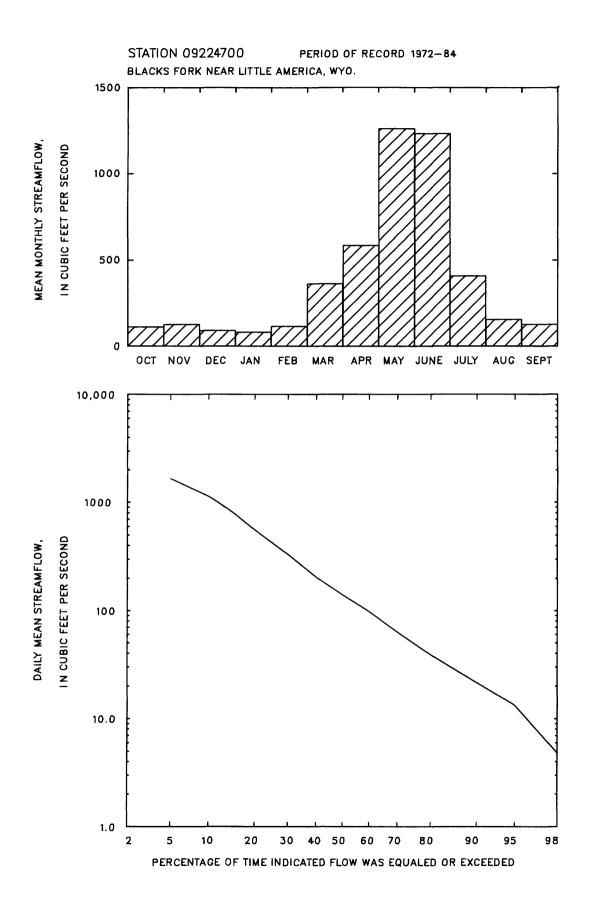
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1972-84

Period (con-		Discharg recurren exceedan	ce inter	val, in	years,	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2760	4700	5530			
3	2500	4370	5240			
7	2190	3940	4830			
15	1890	3450	4250			
30	1600	2860	3490			
60	1310	2250	2650			
90	1080	1790	2070			

Duration of daily mean flow for period of record 1972-84

		Disc	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded	for indi	cated p	ercenta	ge of	time		
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
. 3400	1640	1130	789	554	332	204	139	98	63	39	21	13	4.8	2.1	1.1	0.38



09225000 BLACKS FORK NEAR GREEN RIVER, WYO.

LOCATION.--Lat 41°23', long 109°37' in sec.8 T.16 N., R.108 W., Sweetwater County, on right bank 40 ft downstream from highway bridge, 450 ft downstream from Dry Creek, 12.5 mi southwest of town of Green River, and at mile 14.3.

DRAINAGE AREA. -- 3,670 mi², approximately.

PERIOD OF RECORD. -- August 1947 to July 1962.

GAGE. -- Water-stage recorder. Datum of gage is 6,017.26 ft. Prior to August 19, 1955, at site 250 ft upstream at same

REMARKS. -- Diversions above station for irrigation of about 114,000 acres. One reservoir (capacity about 28,000 acre-ft) for the Utah Power and Light Co. (completed in May 1961), one reservoir (capacity, 1,058 acre-ft) for Kemmerer water supply and 17 smaller reservoirs (total capacity, about 2,300 acre-ft) for irrigation, recreation, and _railroad use above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s March 30, 1962, gage height, 10.07 ft; maximum gage height, 13.68 ft February 28, 1950, from floodmarks (ice jam); no flow at times in 1948, 1954-57, 1959-61.

Monthly and annual streamflow 1948-61

Magnitude and probability of annual low flow based on period of record 1949-62

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		Discharge recurrence on-exceed	e interv	al, in	years, a	nd
	(10 /8)	(10 /8)	(10 /8)	(10 /5)	acton		tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	177	0.03	50	62	1.2	1.4							
November	97	0.91	46	36	0.78	1.3							
December	110	1.0	41	32	0.77	1.2	1	0.00	0.00	0.00			
January	88	0.00	36	31	0.87	1.0	3	0.00	0.00	0.00			
February	145	0.00	67	48	0.72	1.9	7	0.00	0.00	0.00			
March	700	82	302	209	0.69	8.6	14	0.00	0.00	0.00			
April	1770	142	620	450	0.73	17.6	30	0.10	0.00	0.00			
May	3080	67	1120	828	0.74	31.8	60	1.7	0.03	0.00			
June	2220	34	983	669	0.68	28.0	90	9.5	1.2	0.33			
July	454	0.14	163	153	0.94	4.7	120	16	4.0	1.7			
August	240	0.76	59	73	1.2	1.7	183	25	8.1	4.1			
September	123	0.00	28	39	1.4	0.8							
Annual	634	35	293	177	0.61	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

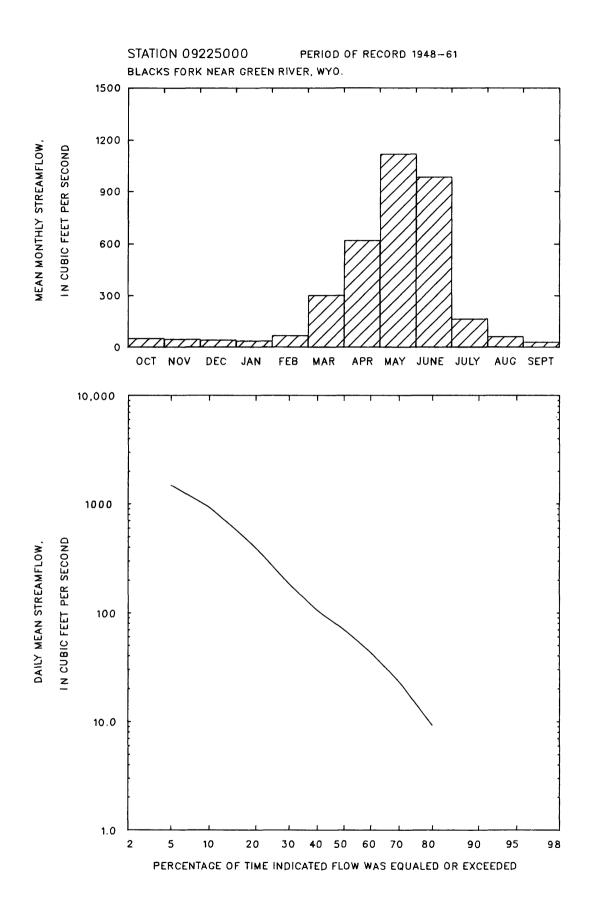
		/s, for in			e interval percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
~					

Magnitude and probability of annual high flow based on period of record 1948-61

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	and
secu- tive days)	2 5 0%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2500	3990	4700			~
3	229 0	3720	4440			
7	1990	3370	4130			
15	1660	2870	3580			
30	1360	2320	2880			
60	1060	1820	2250			
90	880	1490	1820			

Duration of daily mean flow for period of record 1948-61

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or ind	icated p	percent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3030	1470	929	584	393	184	104	70	43	23	9.2	0.44	0.09	0.03	0.02	0.01	0.00



09225500 GREEN RIVER NEAR LINWOOD, UTAH

LOCATION.--Lat 40°58'00", long 109°34'40", in SE% sec.29, T.3 N., R.21 E., Daggett County, on right bank 0.25 mi upstream from Henrys Fork, 2 mi south of Wyoming-Utah State line, and 5 mi southeast of Linwood.

DRAINAGE AREA.--14,300 mi², approximately.

PERIOD OF RECORD. -- October 1928 to March 1963.

GAGE.--Water-stage recorder. Datum of gage is 5,844.64 ft, from Bureau of Reclamation bench mark. Prior to October 17, 1930, at site 0.75 mi upstream at different datum. October 17, 1930, to October 22, 1933, at present site at datum 0.77 ft higher.

REMARKS.--Natural flow of stream affected by transbasin diversions, storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s June 12, 1957, gage height, 11.77 ft; maximum gage height, 13.47 ft March 1, 1950 (backwater from ice); minimum discharge recorded, 196 ft³/s November 27, 1934, gage height, -0.10 ft.

Monthly and annual streamflow 1929-62

Magnitude and probability of annual low flow based on period of record 1930-63

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	1	recurren	cé inter	val, in y	indicate years, as y, in per	nd
							tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	1640	309	820	359	0.44	3.6							
November	1280	312	690	225	0.33	3.0							
December	913	273	519	169	0.32	2.2	1	306	250	225	207	188	
January	734	254	445	129	0.29	1.9	3	315	260	236	218	200	
February	1200	336	550	196	0.36	2.4	7	333	275	250	232	214	
March	3020	550	1270	605	0.48	5.5	14	356	293	266	247	229	
April	5910	493	2670	1420	0.53	11.6	30	383	311	280	258	236	
May	8800	955	4080	2130	0.52	17.6	60	416	337	303	279	256	
June	11800	889	6380	2580	0.40	27.6	90	452	367	332	306	280	
July	7250	427	3260	1770	0.54	14.1	120	499	404	363	333	303	
August	4690	347	1570	957	0.61	6.8	183	594	461	402	359	315	
September	1720	268	859	411	0.48	3.7							
Annua l	3400	547	1930	684	0.35	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

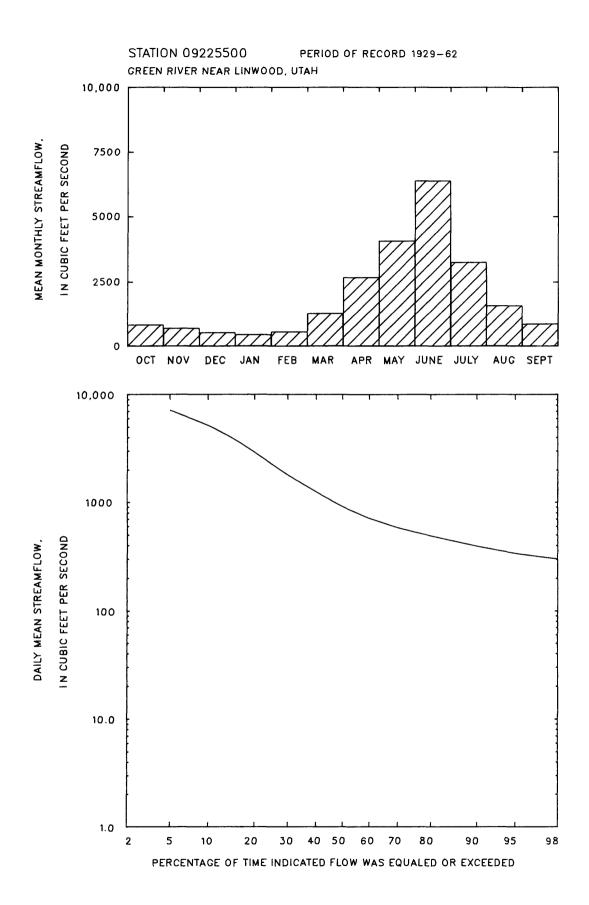
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1929-62

Period (con-		recurre	icé inter	rval, in	r indicat years, a in perce	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	10900	14500	15900	16900	17300	
3	10400	13900	15300	16300	16800	
7	9550	12800	14100	15200	15700	
15	8400	11200	12400	13400	13800	
30	7080	9530	10600	11500	11900	
60	5680	7840	8790	9620	10000	
90	4850	6700	7500	8180	8520	

Duration of daily mean flow for period of record 1929-62

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
11600	7140	5180	3880	2920	1780	1240	901	708	578	485	392	335	299	271	254	232



09226000 HENRYS FORK NEAR LONETREE, WYO.

LOCATION.--Lat 41°00'23", long 110°16'13", in NE\SE\SW\ sec.21 T.12 N., R.114 W., Uinta County, on right bank 0.6 mi downstream from Wasatch National Forest boundary, 1 mi downstream from West Fork, 1.5 mi downstream from Utah-Wyoming State line, and 7 mi southwest of Lonetree.

DRAINAGE AREA. -- 56 mi², approximately.

PERIOD OF RECORD.--October 1942 to October 1971, May to September 1972. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,350 ft, from topographic map. Prior to August 12, 1953, at site 0.5 mi upstream at different datum.

REMARKS. -- One diversion in Utah above station for irrigation of land below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,010 ft³/s June 10, 1965, gage height, 5.70 ft in gage well, 6.30 ft from floodmarks, on basis of slope-area measurement of peak flow; minimum daily, 1.8 ft³/s January 12, 19, 26, 27, 1963, but may have been less on individual days during periods of ice effect or no gage-height record.

Monthly and annual streamflow 1946-71

Magnitude and	probability of	annual	low flow
based on	period of reco	rd 1947-7	71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	:	recurren	cé inter	val, in	indicate years, as y, in per	nd
							tive days)	2 5 0%	5 20%	10 10%	20 5%	50 2%	100 1%
October	33	5.3	14	7.0	0.52	2.8							
November	17	5.1	9.7	3.4	0.35	2.0							
December	15	3.2	7.3	2.6	0.35	1.5	1	4.4	3.2	2.6	2.2	1.7	
January	12	2.4	6.1	2.4	0.40	1.3	3	4.5	3.3	2.7	2.2	1.8	
February	10	2.8	5.9	2.1	0.37	1.2	7	4.8	3.4	2.8	2.3	1.8	
March	12	3.6	6.7	2.2	0.32	1.4	14	5.0	3.5	2.8	2.3	1.8	
April	62	6.0	17	12	0.71	3.5	30	5.1	3.6	3.0	2.5	2.0	
May	180	37	107	40	0.37	22.3	60	5.5	4.0	3.3	2.8	2.4	
June	484	49	189	96	0.51	39.2	90	5.8	4.3	3.6	3.2	2.7	
July	318	23	74	59	0.79	15.4	120	6.2	4.6	4.0	3.5	3.0	
August	113	9.9	29	20	0.70	5.9	183	7.9	5.9	5.1	4.5	3.9	
September	51	6.4	17	10	0.61	3.5					·		
Annual	93	21	40	14	0.35	100						•	

Magnitude and probability of instantaneous peak flow based on 30 years of record

		/s, for in			
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
583	900	1150	1500	1790	2110

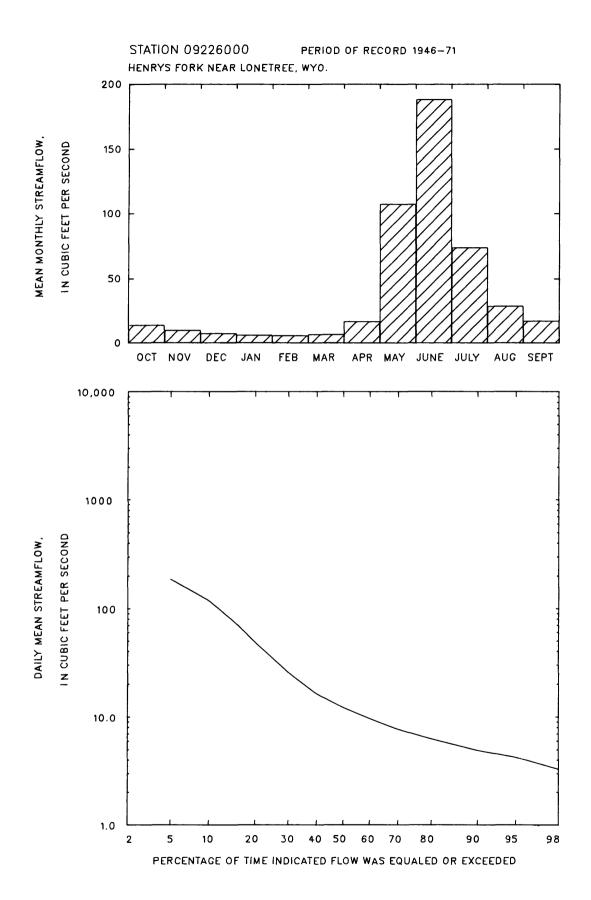
Weighted skew = 0.290

Magnitude and probability of annual high flow based on period of record 1946-71

Period (con-		recurre	ice inter	t ³ /s, for rval, in ability,	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	399	630	831	1150	1440	
3	358	550	706	943	1150	
7	304	453	566	726	85 8	
15	252	360	434	532	607	
30	208	287	339	402	448	
60	152	208	246	296	335	
90	117	159	189	229	261	

Duration of daily mean flow for period of record 1946-71

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded	for indi	cated p	percenta	ge of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
373	185	118	7 5	48	25	16				6.2	_			2.8		2.0



09226500 MIDDLE FORK BEAVER CREEK NEAR LONETREE, WYO.

LOCATION.--Lat 40°56'40", long 110°10'43", in SW\2SW\2 sec.31 T.3 N., R.16 E., Summit County, Utah, on left bank 500 ft north of Wasatch National Forest boundary, 1 mi southwest of Hole-in-the-Rock ranger station, 3.5 mi south of Utah-Wyoming State line, and 7.5 mi south of Lonetree.

DRAINAGE AREA. -- 28 mi², approximately.

PERIOD OF RECORD.--October 1948 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 8,450 ft, from topographic map.

REMARKS. -- No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 775 $\rm ft^3/s$ June 11, 1965, gage height, 4.36 $\rm ft$; minimum, 2.1 $\rm ft^3/s$ November 13, 1958, result of freezeup.

Monthly and annual streamflow 1949-70

Magnitude and probability of annual low flow based on period of record 1950-70

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	:	recurren	ce inter	3/s, for val, in y	years, a	nd
	(10 / 5)	(10 /0)		(10 / 0)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	23	4.8	9.9	3.9	0.40	3.6							
November	15	3.9	7.2	2.3	0.32	2.6							
December	7.6	3.5	5.1	0.99	0.19	1.9	1	3.4	3.1	2.9	2.8		
January	6.0	3.2	4.3	0.72	0.17	1.6	3	3.4	3.1	3.0	2.8		
February	5.2	3.0	3.8	0.50	0.13	1.4	7	3.4	3.1	3.0	2.8		
March	5.3	3.0	3.9	0.67	0.17	1.4	14	3.5	3.2	3.0	2.9		
April	17	4.1	7.6	3.3	0.44	2.8	30	3.6	3.2	3.0	2.9		
May	92	19	55	22	0.40	19.8	60	3.8	3.3	3.2	3.0		
June	256	23	107	61	0.57	38.9	90	4.0	3.6	3.3	3.2		
July	160	14	39	31	0.81	14.0	120	4.3	3.8	3.6	3.4		
August	67	7.6	20	12	0.59	7.3	183	5.5	4.7	4.4	4.1		
September	30	5.4	13	6.0	0.46	4.7							
Annual	49	12	23	8.4	0.37	100							

Magnitude and probability of instantaneous peak flow based on 22 years of record

^	-	10	05		100
2 50%	ა 20%	10 10%	25 4%	50 2%	100 1%
JO 76		10%			1 /0
318	482	599	755	877	1000

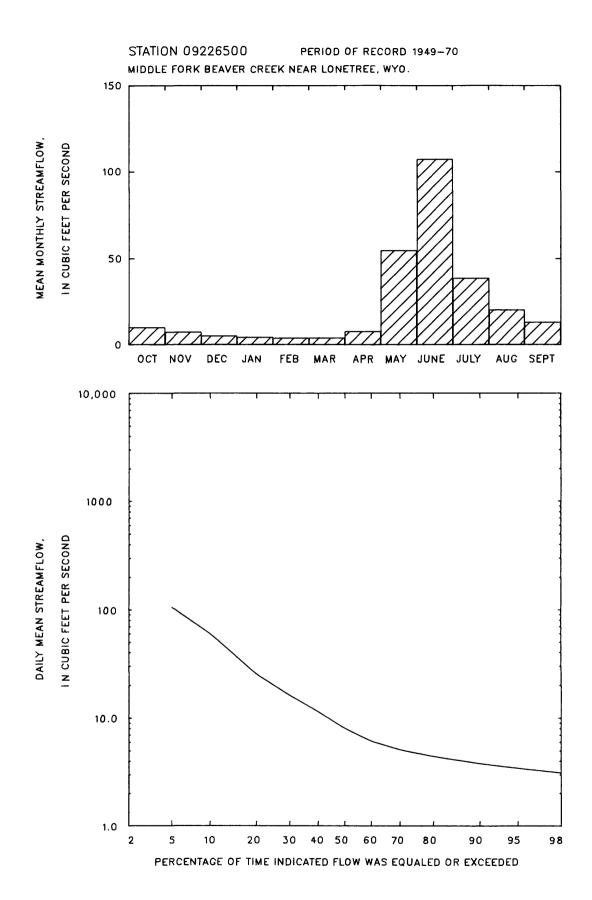
Weighted skew = 0.009

Magnitude and probability of annual high flow based on period of record 1949-70

Period (con-		recurre	nce inter	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	222	339	423	538		
3	207	313	386	480		
7	177	265	324	399		
15	143	206	247	297		
30	116	168	202	245		
60	82	119	144	177		
90	62	90	110	137		

Duration of daily mean flow for period of record 1949-70

		Dis	charge,	, in ft ³	/s, whi	ch was	equaled	or exc	eeded 1	or indi	cated p	ercenta	ge of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
215	105	60	37	25	16	11	8.0	6.1	5.1	4.4	3.8	3.4	3.1	2.9	2.9	2.8



09227000 EAST FORK BEAVER CREEK NEAR LONETREE, WYO.

LOCATION.--Lat 40°56'40", long 110°09'40", in NE% sec.6, T.2 N., R.16 E., Salt Lake meridian, Summit County, Utah, on right bank at forest boundary, 1 mi south of Hole-in-the-Rock ranger station, 3.5 mi south of Utah-Wyoming State line, and 7.5 mi south of Lonetree.

DRAINAGE AREA. -- 8.2 mi², approximately.

PERIOD OF RECORD. -- October 1948 to September 1962.

GAGE.--Water-stage recorder. Concrete control since August 1954. Altitude of gage is 8,600 ft, from topographic map. Prior to October 11, 1950, at site 50 ft upstream at different datum.

REMARKS. -- Some regulation by Hoop Lake (capacity, 3,920 acre-ft), which receives water from Thompson Creek, a tributary to Burnt Fork.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 74 ft³/s May 31, June 1, 1952; minimum daily, 2.4 ft³/s March 30, 1950.

Monthly and annual streamflow 1949-62

Magnitude and probability of annual low flow based on period of record 1950-62

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	5.2	3.2	4.1	0.54	0.13	4.8
November	5.1	3.1	3.9	0.50	0.13	4.5
December	4.2	2.7	3.7	0.38	0.10	4.3
January	4.3	2.6	3.5	0.39	0.11	4.0
February	4.3	2.6	3.6	0.53	0.15	4.1
March	4.3	2.6	3.8	0.43	0.11	4.4
April	12	4.5	5.8	1.9	0.33	6.7
May	28	6.9	13	5.0	0.39	14.9
June	17	6.2	11	3.9	0.37	12.3
July	41	6.4	19	10	0.55	22.2
August	22	3.8	9.6	6.2	0.65	11.2
September	10	3.9	5.6	2.2	0.40	6.6
Annual	9.2	5.8	7.2	1.1	0.15	100

Period (con-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent									
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%				
1	3.1	2.7	2.6	2.4						
3	3.1	2.8	2.6	2.5						
7	3.1	2.8	2.7	2.6						
14	3.2	2.9	2.7	2.6						
30	3.3	2.9	2.8	2.6						
60	3.4	3.0	2.9	2.7						
90	3.5	3.1	2.9	2.8						
120	3.6	3.2	3.0	2.8						
183	3.7	3.5	3.3	3.3						

Magnitude and probability of instantaneous peak flow based on --- years of record

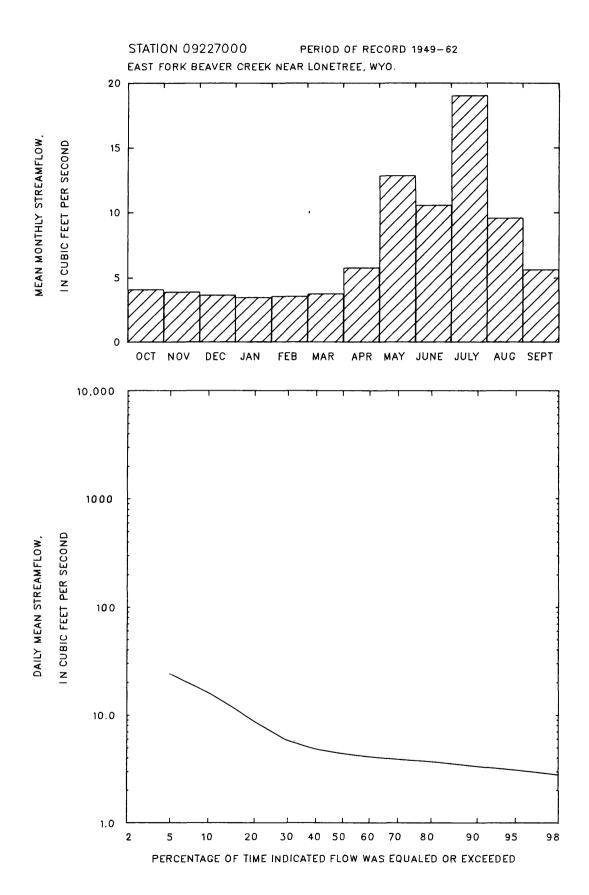
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1949-62

Period (con-		recurrer	ge, in ft nce inter nce proba	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	36	50	61	77		
3	35	47	56	69		
7	33	43	50	59		
15	29	37	42	50		
30	24	31	36	42		
60	18	23	25	29		
90	15	18	20	23		

Duration of daily mean flow for period of record 1949-62

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime	,,,	
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
40	24	16	12	8.6	5.7	4.8	4.3	4.1	3.8	3.7	3.3	3.1	2.8	2.6	2.5	2.4



09227500 WEST FORK BEAVER CREEK NEAR LONETREE, WYO.

LOCATION.--Lat 40°56'50", long 110°13'00", in SW% sec.35 T.3 N., R.15 E., Salt Lake meridian, Summit County, Utah, on right bank at forest boundary, 0.12 mi upstream from Fellow Creek, 3.5 mi south of Utah-Wyoming State line, and 7.5 mi southwest of Lonetree.

DRAINAGE AREA. -- 23 mi², approximately.

PERIOD OF RECORD. -- October 1948 to September 1962.

GAGE. -- Water-stage recorder. Altitude of gage is 8,700 ft, from topographic map.

REMARKS .-- No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 417 ft³/s June 13, 1953, from rating curve extended above 250 ft³/s on basis of logarithmic plotting; maximum gage height, 3.25 ft June 7, 1957, minimum discharge, 2.0 ft³/s March 1, 1954 (discharge measurement).

Monthly and annual streamflow 1949-62

Magnitude	and	probabi:	lity	ofa	nnual	low	flow
base	ed or	n period	of	recor	rd 1950	-62	

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	:	recurren	cé inter	val, in	indicate years, an y, in per	nd
	(10 /3)		(10 /8)	(10 /8)	acton		tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	19	4.0	7.4	3.6	0.49	3.8							
November	13	3.1	5.6	2.4	0.43	2.9							
December	6.3	2.5	3.9	0.91	0.24	2.0	1	2.6	2.3	2.2	2.1		
Jan uary	5.0	2.5	3.2	0.68	0.22	1.6	3	2.6	2.3	2.2	2.1		
February	4.2	2.0	2.8	0.52	0.19	1.4	7	2.7	2.4	2.2	2.1		
March	4.3	2.3	3.1	0.59	0.19	1.6	14	2.7	2.4	2.2	2.1		
April	15	3.3	6.6	3.0	0.46	3.4	30	2.8	2.4	2.2	2.1		
May	62	18	35	14	0.40	17.8	60	2.8	2.5	2.3	2.2		
June	135	20	71	31	0.43	36.4	90	3.0	2.6	2.4	2.3		
July	71	16	31	16	0.51	16.1	120	3.2	2.7	2.6	2.4		
August	28	6.8	16	6.5	0.42	8.0	183	4.0	3.3	3.1	3.0		
September	27	4.0	9.6	5.5	0.57	5.0							
Annual	24	9.4	16	4.5	0.28	100							

Magnitude and probability of instantaneous peak flow based on 14 years of record

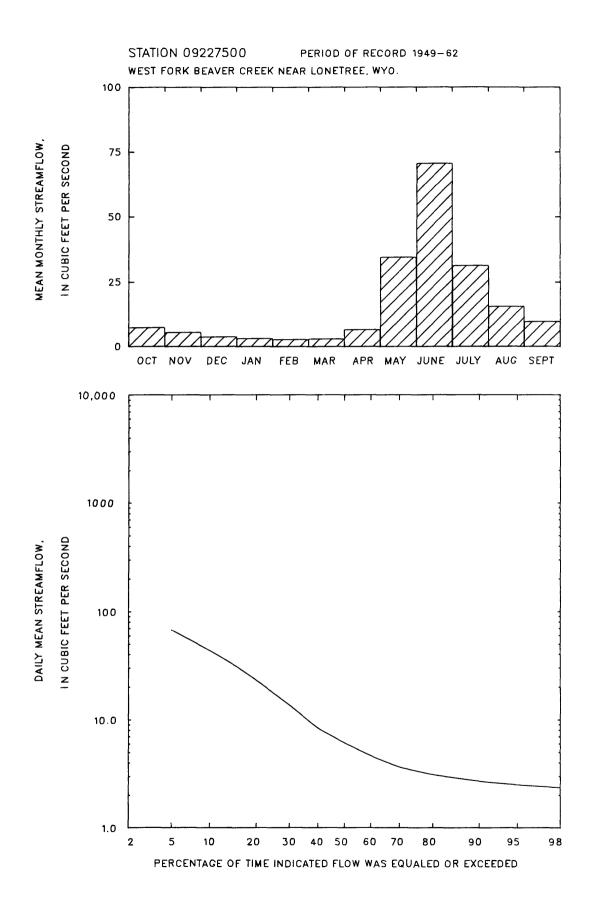
	ars, and			recurrence lity, in	
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
168	254	315	396	460	525

Magnitude and probability of annual high flow based on period of record 1949-62

Period (con-		recurre	ncé inte	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	131	193	242	311		
3	122	179	220	273		
7	107	156	188	228		
15	92	127	148	172		
30	76	102	117	133		
60	56	75	85	97		
90	45	59	69	80		

Duration of daily mean flow for period of record 1949-62

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	9 9%	99.5%	99.9%
122	67	43	31	23	14	8.4	6.1	4.6	3.6	3.1	2.7	2.5	2.3	2.3	2.2	2.0



09228000 HENRYS FORK NEAR BURNTFORK, WYO.

LOCATION.--Lat 41°03', long 110°03', in sec.4 T.12 N., R.112 W., on left bank at Uinta-Sweetwater County line, 2.5 mi upstream from Burnt Fork and 2.75 mi west of Burntfork School.

DRAINAGE AREA. -- 242 mi2.

PERIOD OF RECORD. --October 1942 to September 1954. Monthly discharge only for some periods; published in WSP 1313:

GAGE.--Water-stage recorder. Altitude of gage is 7,120 ft, by barometer. Prior to December 22, 1948, at site 400 ft upstream at different datum.

REMARKS .-- Diversions above station for irrigation of about 9,000 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,830 ft³/s June 14, 1953, gage height, 5.29 ft, from rating curve extended above 860 ft³/s; minimum daily, 0.4 ft³/s September 28, 1953.

Monthly and annual streamflow 1943-54

Magnitude and probability of annual low flow based on period of record 1944-54

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	45	7.6	30	12	0.40	3.7
November	45	19	31	8.8	0.29	3.9
December	34	17	25	6.2	0.25	3.2
January	32	16	23	5.6	0.24	2.9
February	39	15	24	6.4	0.27	3.0
March	54	17	34	9.0	0.26	4.3
April	153	29	72	38	0.52	9.1
May	278	43	152	77	0.51	19.2
June	461	14	248	146	0.59	31.2
July	183	16	88	57	0.64	11.1
August	110	11	47	33	0.71	5.9
September	43	5.4	21	11	0.54	2.6
Annua1	115	22	66	26	0.39	100

Period (con- secu-		recurren	ce inter	3/s, for inval, in you	ears, a	ad
tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	11	4.2	1.9	0.85		
3	12	4.5	2.1	0.97		
7	13	5.1	2.4	1.2		
14	14	6.1	3.2	1.7		
30	16	8.5	5.6	3.7		
60	18	12	8.9	6.9		
90	20	14	11	8.9		
120	22	16	13	11		
183	23	18	16	13		

Magnitude and probability of instantaneous peak flow based on --- years of record

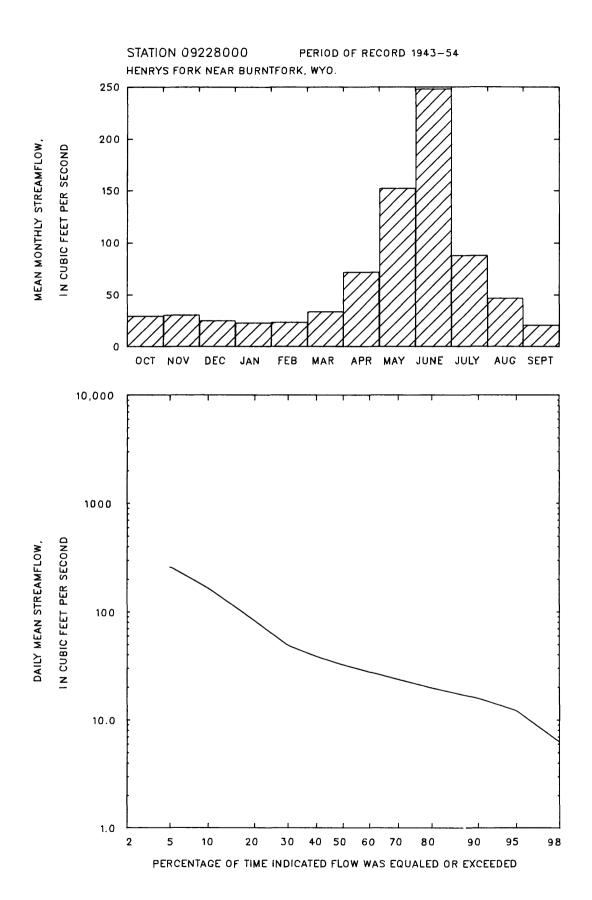
		/s, for in			
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1943-54

Period (con-		recurre	ge, in ft nce inter nce proba	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	572	922	1150			
3	489	796	990			
7	419	665	796			
15	336	526	621			
30	275	412	471			
60	212	312	357			
90	170	248	286			

Duration of daily mean flow for period of record 1943-54

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded	for ind	icated	percenta	ge of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
517	259	166	112	82	49	38	32	27	23	19	16	12	6.3	3.9	2.3	0.54



09228500 BURNT FORK NEAR BURNTFORK, WYO.

DRAINAGE AREA. -- 52.8 mi2.

PERIOD OF RECORD. --April 1943 to September 1983 (no winter records since 1971). Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,430 ft, from topographic map. Prior to June 10, 1965, water-stage recorder at site 0.5 mi downstream at different datum. June 10 to October 5, 1965, water-stage recorder at site 400 ft downstream at different datum.

REMARKS.--Flow is partially regulated by Island Lake, capacity, 797 acre-ft, and Beaver Meadows Reservoir, capacity, 1,722 acre-ft. Diversion out of basin above station into Hoop Lake, capacity, 3,920 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,200 ft³/s, June 10, 1965, gage height, not determined, from slope-area measurement of peak flow; minimum daily, 0.65 ft³/s, March 31, 1967.

COOPERATION .-- Records collected and by Office of the Wyoming State Engineer and computed and reviewed by Geological Survey.

Monthly and annual streamflow 1946-71

Magnitude and probability of annual low flow based on period of record 1947-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (f+3/e)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		recurren	ce inter	val, in	indicate years, an y, in per	ıd
		· · · · · · · · · · · · · · · · · · ·					tive days)	2 5 0%	5 20%	10 1 0%	20 5%	50 2%	100 1%
October	32	5.1	12	5.9	0.50	3.3							
Nov em ber	19	4.3	7.7	3.3	0.43	2.1							
December	10	3.5	6.5	2.0	0.32	1.8	1	3.9	2.2	1.5	1.0	0.64	
January	10	2.8	5.6	2.1	0.36	1.5	3	4.1	2.3	1.6	1.1	0.66	
February	13	2.1	5.5	2.4	0.43	1.5	7	4.2	2.5	1.7	1.2	0.73	
March	13	1.2	5.6	2.2	0.40	1.5	14	4.5	2.7	1.9	1.3	0.85	
April	28	1.1	9.3	5.5	0.59	2.6	30	4.9	3.0	2.2	1.6	1.0	
May	110	17	57	24	0.43	15.7	60	5.1	3.5	2.8	2.3	1.8	
June	33 0	51	131	62	0.47	36.1	90	5.3	3.8	3.1	2.6	2.2	
July	168	32	67	30	0.45	18.6	120	5.6	4.2	3.5	3.1	2.6	
August	7 1	15	35	16	0.45	9.8	183	6.6	5.3	4.8	4.4	4.1	
September	48	7.7	20	8.7	0.44	5.5							
Annual	60	17	3 0	9.4	0.31	100							

Magnitude and probability of instantaneous peak flow based on 40 years of record

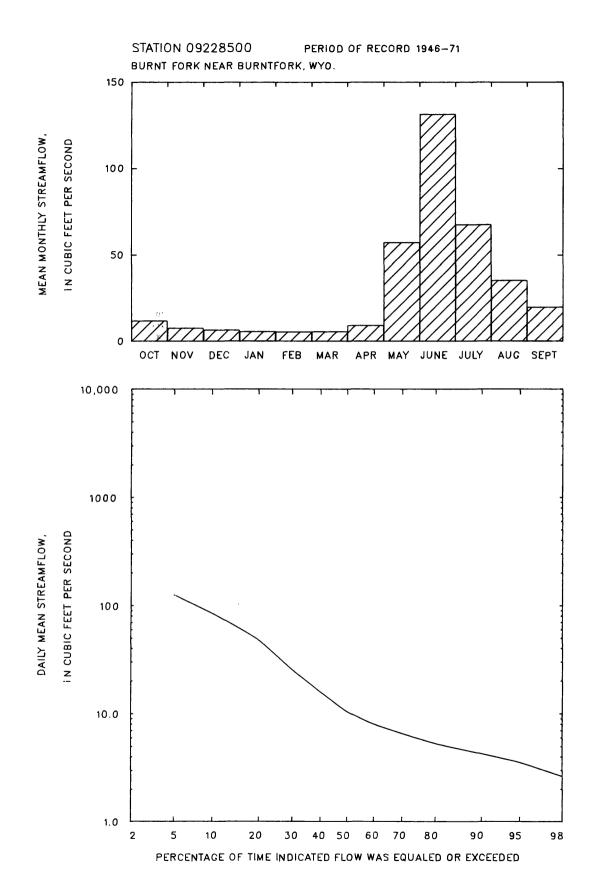
			ndicated : e probabi		
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
270	430	554	733	883	1050

Magnitude and probability of annual high flow based on period of record 1946-71

Period (con-		recurre	nce inte	rval, in	indicat years, a in perce	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100
1	205	358	519	822	1150	
3	184	309	435	664	900	
7	163	259	346	490	627	
15	147	219	273	350	415	
30	130	185	222	271	308	
60	103	140	166	199	224	
90	84	113	132	157	176	~

Duration of daily mean flow for period of record 1946-71

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	3 0%	40%	5 0%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
219	125	85	63	48	25	16	10	7.9	6.5	5.3	4.3	3.5	2.6	2.0	1.3	0.86



09229500 HENRYS FORK NEAR MANILA, UTAH

LOCATION.--Lat 41°00'45", long 109°40'20", in NW\2NW\2 sec.23, T.12 N., R.109 W., Sweetwater County, Wyo., on right bank 0.8 mi north of Wyoming-Utah State line, 1.3 mi upstream from normal high-water line of Flaming Gorge Reservoir at elevation 6,045 ft, and 3.0 mi northeast of Manila, Utah.

DRAINAGE AREA. -- 520 mi², approximately.

PERIOD OF RECORD .-- October 1928 to current year. Prior to October 1971, published as "at Linwood, UT."

GAGE.--Water-stage recorder. Altitude of gage is 6,060 ft, from topographic map. Prior to October 1, 1957, non-recording gages or water-stage recorder at several sites about 2.0 mi downstream at various datums. October 1, 1957, to December 2, 1965, water-stage recorders at sites about 1.0 mi upstream at different datums.

REMARKS.--Peoples Irrigation Canal diverts 5.9 mi upstream. Natural flow of stream affected by transbasin diversions, small storage reservoirs, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge determined, 6,750 ft³/s, August 3, 1936, gage height, 7.19 ft, site and datum then in use, from floodmarks, from rating curve extended above 570 ft³/s on basis of slope-area measurement of peak flow; higher discharge occurred July 15, 1959, gage height, 9.42 ft, site and datum then in use, discharge not determined; no flow for several days in 1933-35, 1939-40.

Monthly and annual streamflow 1929-84

Magnitude and probability of annual low flow based on period of record 1930-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	of Period recurrence interval, in year: nual (con- non-exceedance probability, in				ears, and			
	(10 /8)	(10 /8)	(10 /8)	(10 / 5)			tive days)	2 5 0%	5 20%	10 10%	20 5%	50 2%	100 1%	
October	176	0.00	47	42	0.90	4.6								
November	117	13	54	23	0.43	5.2								
December	99	21	46	15	0.32	4.5	1	2.7	0.13	0.00	0.00	0.00	0.00	
January	103	15	41	17	0.40	4.0	3	2.8	0.17	0.00	0.00	0.00	0.00	
February	89	15	45	13	0.29	4.4	7	3.0	0.27	0.00	0.00	0.00	0.00	
March	165	25	69	28	0.40	6.7	14	3.7	0.45	0.05	0.00	0.00	0.00	
April	196	3.9	86	43	0.49	8.4	30	5.5	0.84	0.11	0.00	0.00	0.00	
May	541	3.8	154	109	0.71	15.0	60	11	1.9	0.46	0.03	0.00	0.00	
June	1380	0.10	291	271	0.93	28.4	90	17	3.3	1.0	0.35	0.08	0.03	
July	703	0.00	102	138	1.4	9.9	120	21	6.3	2.9	1.5	0.60	0.32	
August	323	0.09	54	78	1.4	5.3	183	35	16	8.9	5.2	2.6	1.5	
September	191	0.00	36	46	1.3	3.5								
Annual	273	17	85	50	0.59	100								

Magnitude and probability of instantaneous peak flow based on --- years of record

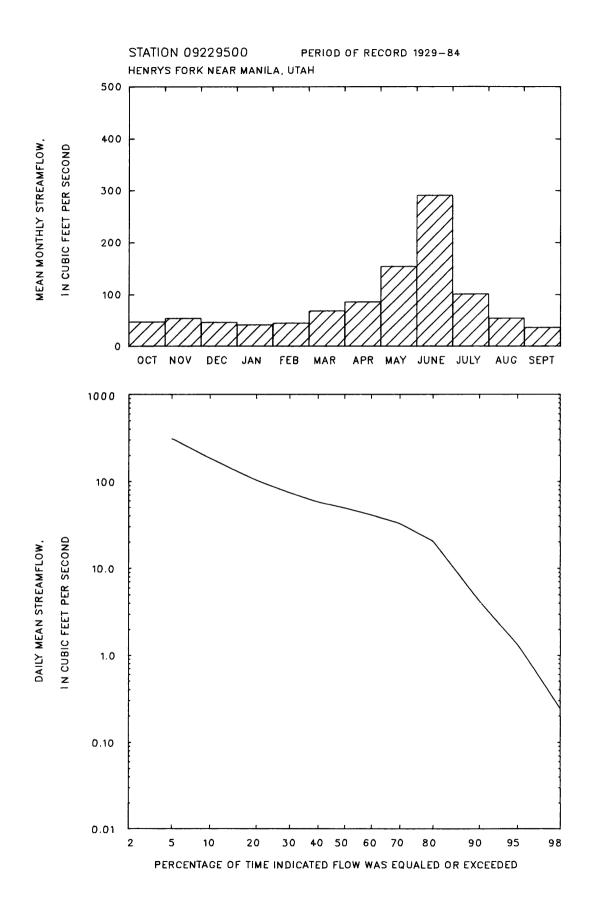
		exceedance			e interval percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1929-84

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	nd
secu- tive days)	2 5 0%	5 20%	10 10%	25 4%	50 2%	100 1%
1	677	1250	1710	2370	2930	3530
3	588	1080	1450	1960	2360	2760
7	481	895	1200	1610	1930	2250
15	378	701	932	1230	1450	1670
30	289	534	714	951	1130	1310
60	206	374	499	670	805	943
90	170	296	389	516	614	716

Duration of daily mean flow for period of record 1929-84

	Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
743	311	184	131	102	73	57	49	41	32	20	4.2	1.3	0.24	0.09	0.04	0.01



09234500 GREEN RIVER NEAR GREENDALE, UTAH

(Before construction of Flaming Gorge Dam.)

LOCATION.--Lat 40°54'30", long 109°25'20", in NW\hW\hat{8E\hat{1}} sec.15, T.2 N., R.22 E., Daggett County, Utah, Ashley National Forest, on right bank 0.5 mi downstream from Flaming Gorge Dam, 2 mi south of Dutch John, 4 mi northeast of Greendale, and 407.0 mi from mouth.

DRAINAGE AREA.--19,350 mi², approximately, of which about 4,260 mi² is probably noncontributing. This noncontributing area includes 3,959 mi² in Great Divide Basin in southern Wyoming.

PERIOD OF RECORD. -- October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,594.48 ft. Prior to September 2, 1959, water-stage recorder at site 2.2 mi upstream at different datum.

REMARKS .-- Flow completely regulated by Flaming Gorge Reservoir 0.5 mi upstream beginning November 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s, June 12, 1957, gage height, 10.60 ft, site and datum then in use; maximum gage height, 12.58 ft, July 8, 1983; minimum, 2.3 ft³/s, March 20, 22, 27, 28, 1963.

Monthly and annual streamflow 1951-62

Magnitude and probability of annual low flow based on period of record 1952-62

	Maximum	Minimum	Mean	Stan- dard devia- tion	Coeffi- cient of vari-	Percent of annual	Period (con-		recurren	cé inter	val, in y	indicate years, as	nd
Month	(ft ³ /s)	(ft ³ /s)	(ft ³ /s)	(ft ³ /s)	ation	runoff	secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100
October	1610	573	920	325	0.35	3.6							
November	1340	576	813	219	0.27	3.2							
December	988	323	628	195	0.31	2.5	1	335	281	253	232		
January	814	391	597	168	0.28	2.4	3	350	306	286	270		
February	1500.	443	792	307	0.39	3.1	7	378	333	316	305		
March	2430	709	1410	637	0.45	5.6	14	415	357	336	323		
April	6290	1270	2720	1620	0.60	10.8	30	481	391	354	328		
May	9610	1280	4460	2570	0.58	17.7	60	523	428	387	357		
June	11400	3230	7000	2900	0.41	27.7	90	565	463	418	384		
July	7000	909	3380	1880	0.56	13.4	120	617	521	479	447		
August	3710	698	1630	819	0.50	6.5	183	696	592	549	519		
September	1640	586	913	322	0.35	3.6							
Annual	3230	1030	2110	750	0.36	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

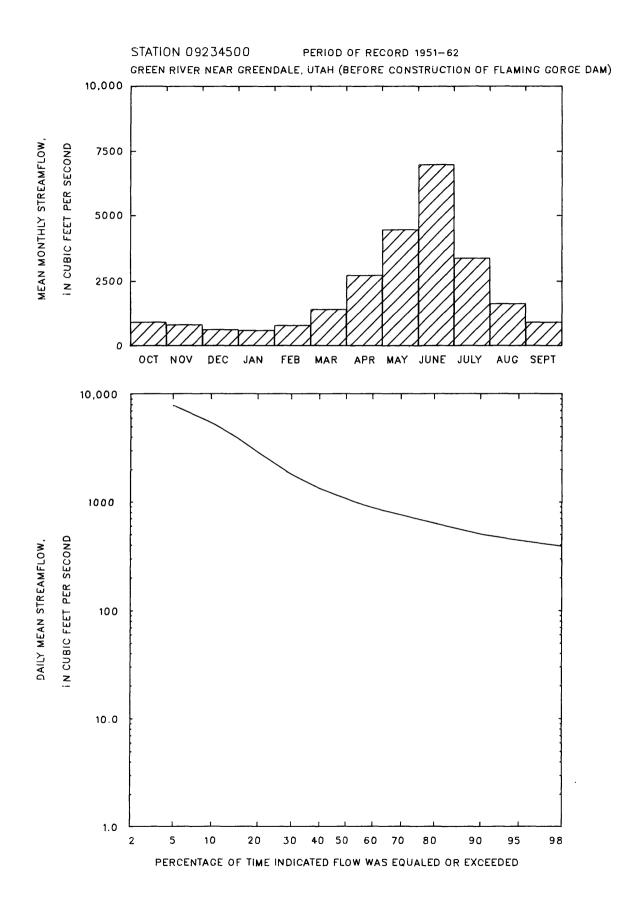
ın ye	ars, and	exceedance	e probabi	ity, in	percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1951-62

Period (con-		recurre	ge, in ft nce inter nce proba	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	12000	16300	18500			
3	11500	15800	18000			
7	10800	14800	17000			
15	9440	13000	14900			
30	7570	10600	12300			
60	5890	8390	9830			
90	4960	7110	8400			

Duration of daily mean flow for period of record 1951-62

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
13100	7790	5440	3940	2890	1800	1320	1070	876	755	631	500	437	387	350	324	273



09234500 GREEN RIVER NEAR GREENDALE, UTAH

(After construction of Flaming Gorge Dam)

Monthly and annual streamflow 1963-84

Magnitude and probability of annual low flow based on period of record 1964-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	3910	128	1990	934	0.47	7.8
November	3660	90	2060	957	0.46	8.0
December	3630	268	2260	983	0.43	8.8
January	3740	367	2210	979	0.44	8.6
February	4090	467	2200	1090	0.50	8.6
March	3820	106	1780	1010	0.57	6.9
April	3910	134	1850	929	0.50	7.2
May	5310	130	2100	1270	0.60	8.2
June	7960	125	2260	1550	0.69	8.8
July	10100	104	2530	1950	0.77	9.9
August	5060	102	2340	1070	0.46	9.1
September	3730	113	2090	788	0.38	8.1
Annual	4270	231	2140	859	0.40	100

Period (con-		Discharge recurrence on-exceed	cé inter	val, in y	years, an	nd
tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100
1	731	451	299	195		
3	834	501	330	214		
7	927	536	352	230		
14	1020	590	383	246		
30	1190	664	420	263		
60	1450	775	473	285		
90	1650	893	537	317		
120	1870	1050	625	361		
183	2080	1180	702	402		

Magnitude and probability of instantaneous peak flow based on --- years of record

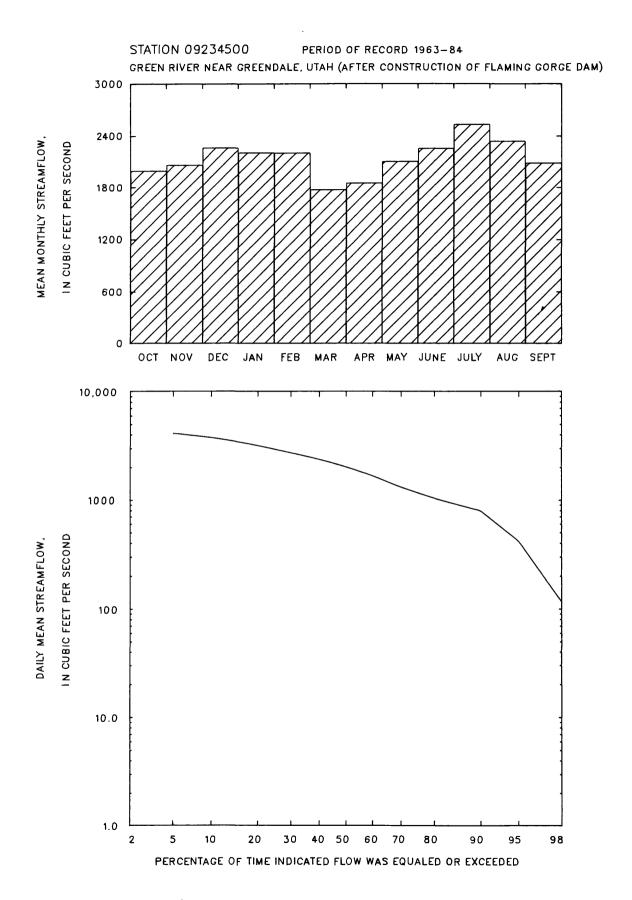
		/s, for in			e interval percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1963-84

Period (con-			ce inter	³ /s, for val, in bility,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	4340	5990	6810	7580		
3	4180	5860	6740	7540		
7	3960	5640	6580	7480		
15	3650	5290	6270	7400		
30	3380	4880	5790	6840		
60	3210	4470	5010	5450		
90	3150	4130	4440	4630		

Duration of daily mean flow for period of record 1963-84

		Dis	charge,	in ft ³	s, whi	ch was	equaled	or exc	eeded f	or indi	cated	percenta	ge of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
5830	4120	3750	3440	3170	2720	2360	2010	1670	1300	1030	788	416	116	99	88	71



09251500 MIDDLE FORK LITTLE SNAKE RIVER NEAR BATTLE CREEK, COLO.

LOCATION. -- Lat 40°59'26", long 107°02'37", in sec.21 T.12 N., R.86 W., Routt County, Colo., 0.25 mi upstream from North Fork and 10 mi east of Battle Creek.

DRAINAGE AREA. -- 120 mi2.

PERIOD OF RECORD. -- May 1912 to September 1922.

GAGE.--Water-stage recorder. Altitude of gage is 7,000 ft, from river-profile map.

REMARKS. -- Diversions for irrigation of about 500 acres above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 4,400 ft3/s May 25, 1920, gage height, 7.70 ft, from rating curve extended above 1,500 ft3/s; minimum not determined, occurred during period of no gage-height record.

COOPERATION. -- Records furnished by State Engineer of Colorado.

Monthly and annual streamflow 1913-22

Magnitude and probability of annual low flow based on period of record 1914-22

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		recurren	e, in ft ce inter dance pro	val, in y	years, a	nd
		(== /=/					tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	45	7.6	23	13	0.57	1.4							
November	30	7.4	17	7.3	0.43	1.0							
December	20	7.0	14	4.4	0.32	0.8	1	8.0	6.0	5.2			
January	20	8.0	14	4.1	0.30	0.8	3	8.4	6.3	5.4			
February	20	8.0	14	4.1	0.30	0.8	7	8.8	6.6	5.8			
March	80	12	40	23	0.58	2.5	14	9.8	7.1	6.0			
April	253	25	153	100	0.66	9.4	30	11	7.6	6.4			
May	1170	331	745	252	0.34	45.9	60	12	8.3	6.9			
June	1110	159	506	300	0.59	31.2	90	13	9.3	7.6			
July	253	18	68	68	1.0	4.2	120	14	9.6	7.8			
August	34	7.2	17	8.7	0.50	1.1	183	15	9.9	8.0			
September	22	6.2	14	5.5	0.39	0.9							
Annual	218	92	136	41	0.30	100							

7	8.8	6.6	5.8	 	
14	9.8	7.1	6.0	 	
30	11	7.6	6.4	 	
60	12	8.3	6.9	 	
90	13	9.3	7.6	 	
120	14	9.6	7.8	 	
183	15	9.9	8.0	 	

Magnitude and probability of instantaneous peak flow based on 10 years of record

	e, in ft ³ , ars, and				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
1740	2750	3470	4430	5180	5950

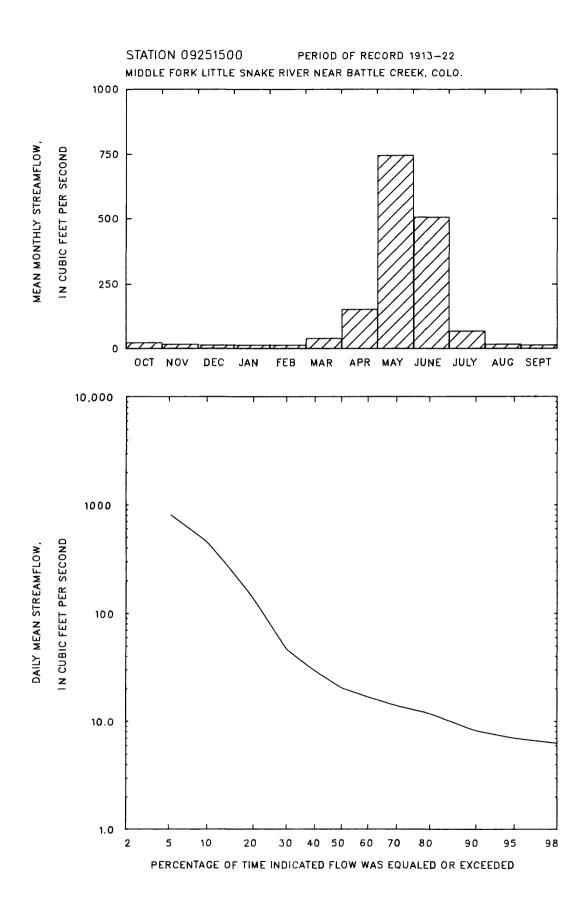
Weighted skew = -0.097

Magnitude and probability of annual high flow based on period of record 1913-22

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1280	1980	2480			
3	1220	1870	2310			
7	1140	1720	2100			
15	990	1480	1810			
30	850	1220	1460			
60	627	851	991			
90	457	605	702			

Duration of daily mean flow for period of record 1913-22

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated]	percenta	ge of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
150 0	824	454	238	137	46	29	20	17	14	12	8.1	6.9	6.3	6.0	5.9	4.6



09253000 LITTLE SNAKE RIVER NEAR SLATER, COLO.

LOCATION.--Lat 40°59'58", long 107°08'34", in SW%NW% sec.15, T.12 N., R.87 W., Routt County, Colo., on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi downstream from Spring Creek, and 12 mi east of Slater.

DRAINAGE AREA. -- 285 mi².

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

GAGE. -- Water-stage recorder. Datum of gage is 6,831.00 ft.

REMARKS. -- Diversions for irrigation of about 2,000 acres above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 4,780 ft3/s, May 23, 1984, gage height, 8.78 ft; maximum gage height 8.95 ft, April 25, 1974; minimum daily discharge, 8.6 ft³/s, September 10, 1944.

Monthly and annual streamflow 1943-47, 1951-84

Magnitude	and probal	bility of	annual	low	flow
based on	period of	record 1	944-47,	1952	2-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	(10 / 5)		(10 / 10)	(10 /3)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%	
October	92	18	37	18	0.50	1.3					-			
November	78	18	34	13	0.37	1.2								
December	59	15	32	10	0.33	1.1	1	15	12	10	9.0	7.9		
January	75	16	32	11	0.36	1.1	3	16	12	11	9.6	8.5		
February	60	20	32	9.2	0.28	1.1	7	17	13	11	10	9.0		
March	93	24	45	16	0.36	1.6	14	18	14	12	11	9.7		
April	842	78	252	186	0.74	8.9	30	20	15	14	12	11		
May	2120	405	1100	383	0.35	38.7	60	23	18	16	14	13		
June	2230	193	1030	496	0.48	36.4	90	25	20	18	17	16		
July	519	33	174	130	0.75	6.1	120	27	22	20	18	17		
August	97	17	40	18	0.46	1.4	183	29	23	21	19	18		
September	80	11	28	15	0.53	1.0								
Annual	423	87	237	79	0.33	100								

Magnitude and probability of instantaneous peak flow based on 38 years of record

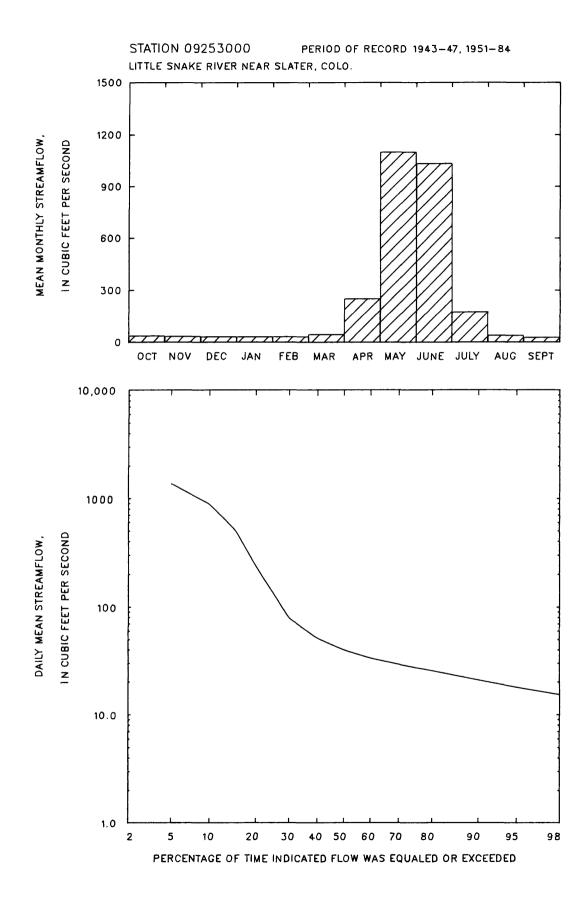
	e, in ft ³ , ars, and				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
2250	3050	3540	4120	4530	4910

Magnitude and probability of annual high flow based on period of record 1943-47, 1951-84

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	nd
secu- tive davs)	2 50%	5 20%	10 10%	25 4%	50 2%	100
			~			-~
1	1910	2580	2970	3410	3700	
3	1820	2460	2820	3230	3490	
7	1710	2300	2630	2980	3210	
15	1550	2090	2390	2710	2920	
30	1380	1850	2100	2380	2560	
60	1090	1460	1670	1900	2050	
90	817	1090	1240	1410	1510	

Duration of daily mean flow for period of record 1943-47, 1951-84

		Dis	charge,	, in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2180	1360	887	509	237	79	51	40	33	2 9	25	21	18	15	13	12	10



09255000 SLATER FORK NEAR SLATER, COLO.

LOCATION. -- Lat 40°58'57", long 107°22'56", in SWaNE's sec.21, T.12 N., R.89 W., Moffat County, Colo., on right bank 15 ft downstream from highway bridge, 1.0 mi upstream from mouth, and 1.5 mi south of Slater.

DRAINAGE AREA. -- 161 mi2.

PERIOD OF RECORD. -- May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft, from river profile map. May 28, 1910, to May 25, 1912, non-recording gage at site 1.5 mi upstream at different datum. July 9, 1931, to May 6, 1932, non-recording gage at site 0.2 mi downstream at different datum.

REMARKS.--Diversions for irrigation of about 500 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft³/s, May 16, 1984, gage height, 11.78 ft (from floodmark), from rating curve extended above 1,000 ft³/s; no flow August 2-10, 1934, August 18, 25-27, 1936, August 29 to September 3, 1954, August 3-4, 15-16, 1977.

Monthly and annual streamflow 1932-84

Magnitude	and	probabil	lity	of a	nnual	low	flow
base	d on	period	of	recor	d 1933	3-84	

0.00

0.00

0.00

0.31

0.68 1.5

3.1

4.5

6.3

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Period (con- secu-		Discharge recurrence	é interv	al, in y	ears, and	d		
			(10 /0)	(10 / 0)		runoff 	tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	50	7.3	18	8.8	0.48	2.0			······································				
November	32	7.7	18	5.8	0.33	1.9							
December	30	7.3	17	4.9	0.29	1.8	1	2.1	0.35	0.00	0.00	0.00	0.0
January	31	8.1	16	5.2	0.32	1.8	3	2.4	0.50	0.00	0.00	0.00	0.0
February	31	9.8	18	4.9	0.28	1.9	7	3.6	1.0	0.38	0.03	0.00	0.0
March	52	13	26	8.7	0.34	2.8	14	4.1	1.9	1.2	0.75	0.45	0.3
April	243	25	110	56	0.51	11.9	30	5.4	2.8	1.9	1.4	0.91	0.0
May	801	46	377	152	0.40	40.9	60	7.3	4.3	3.2	2.5	1.9	1.
June	630	24	262	151	0.58	28.5	90	9.3	6.2	5.0	4.2	3.5	3.
July	189	1.3	40	41	1.0	4.4	120	11	8.2	6.8	5.9	5.1	4.
August	38	1.9	9.7	7.8	0.80	1.1	183	13	10	8.7	7.7	6.8	6.3
September	55	3.2	11	8.1	0.72	1.2			*				
Annual	157	20	77	29	0.37	100							

Magnitude and probability of instantaneous peak flow based on 53 years of record

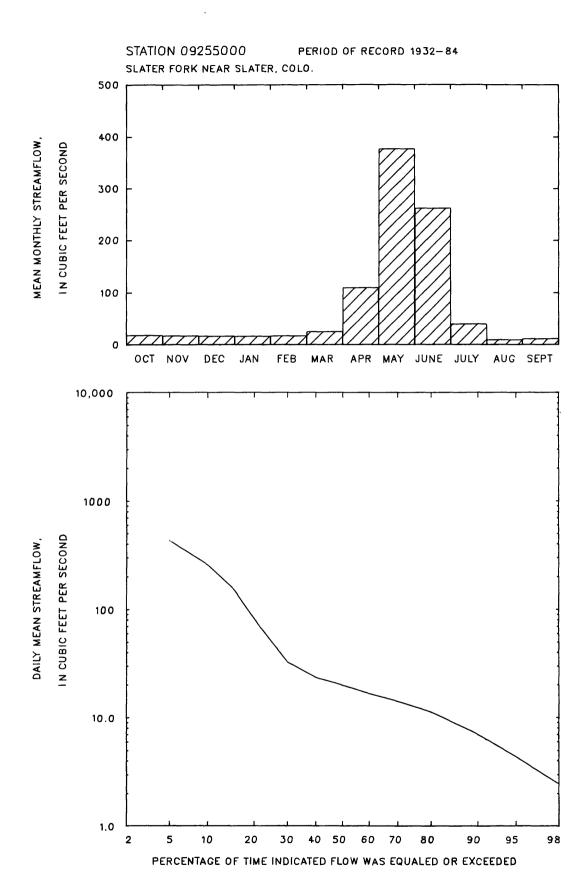
	e, in ft ³ , ars, and				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
847	1200	1440	1750	1 9 80	2220

Magnitude and probability of annual high flow based on period of record 1932-84

Period (con-		recurre	ge, in ft ace inter ace proba	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	699	969	1100	1230	1300	1350
3	637	882	1000	1120	1190	1240
7	566	788	903	1020	1090	1140
15	495	687	787	887	946	994
30	434	596	677	754	797	832
60	340	466	526	583	614	638
90	256	351	398	442	467	487

Duration of daily mean flow for period of record 1932-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
702	428	257	154	81	32	23	20	16	14			4.4	2.4	1.5	0.93	



09255500 SAVERY CREEK AT UPPER STATION, NEAR SAVERY, WYO.

LOCATION. -- Lat 41°13'05", long 107°22'18", in SW\2NW\2NE\3 sec. 2, T.14 N., R.89 W., Carbon County, on left bank 0.8 mi downstream from Coal Gulch, 1 mi upstream from Hayrack Draw, and 14 mi north of Savery.

DRAINAGE AREA. -- 200 mi2.

PERIOD OF RECORD. --October 1940 to September 1944 (no winter records 1942-44), October 1952 to September 1971. Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,000 ft, from topographic map. Prior to July 8, 1943, water-stage recorder at present site at different datum. July 8, 1943, to September 30, 1944, and October 1, 1952, to November 3, 1953, at site 0.3 mi downstream at different datum.

REMARKS.--Diversions for irrigation of about 470 acres above station. Natural flow slightly affected by diversion above station to Platte River basin through Ranger ditch.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 1,680 ft3/s April 15, 1962, gage height, 10.25 ft, from floodmark, from rating curve extended above 420 ft3/s; minimum daily, 0.6 ft3/s August 30 to September 1, 1954, July 20, 1961.

Monthly and annual streamflow 1953-71

Magnitude and probability of annual low flow based on period of record 1954-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	e, in ft ³ ce interv dance pro	al, in y	ears, a	nd
	(10 /8)			(10 /8)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2 %	100 1%
October	27	7.7	15	6.2	0.41	2.8		•					
November	31	9.1	17	5.9	0.35	3.1							
December	24	6.5	15	4.9	0.33	2.8	1	3.9	1.6	0.94	0.59		
January	23	6.3	14	4.8	0.35	2.6	3	4.0	1.7	1.0	0.64		
February	45	7.0	17	8.2	0.47	3.2	7	4.4	1.9	1.2	0.77		
March	117	12	32	23	0.71	5.9	14	5.0	2.4	1.6	1.1		
April	348	58	131	78	0.59	24.3	30	5.8	3.2	2.3	1.7		
May	396	53	172	97	0.56	32.1	60	7.0	4.1	3.1	2.5		
June	214	18	88	65	0.75	16.3	90	8.1	5.1	4.0	3.3		
July	36	1.9	17	12	0.72	3.2	120	9.6	6.4	5.2	4.4		
August	22	2.8	9.6	5.7	0.59	1.8	183	11	8.1	6.8	5.9		
September	30	3.1	10	6.4	0.63	1.9				·····			
Annual	76	18	45	17	0.39	100							

Magnitude and probability of instantaneous peak flow based on 23 years of record

	ars, and		probabi:		percent
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
465	840	1130	1550	1890	2250

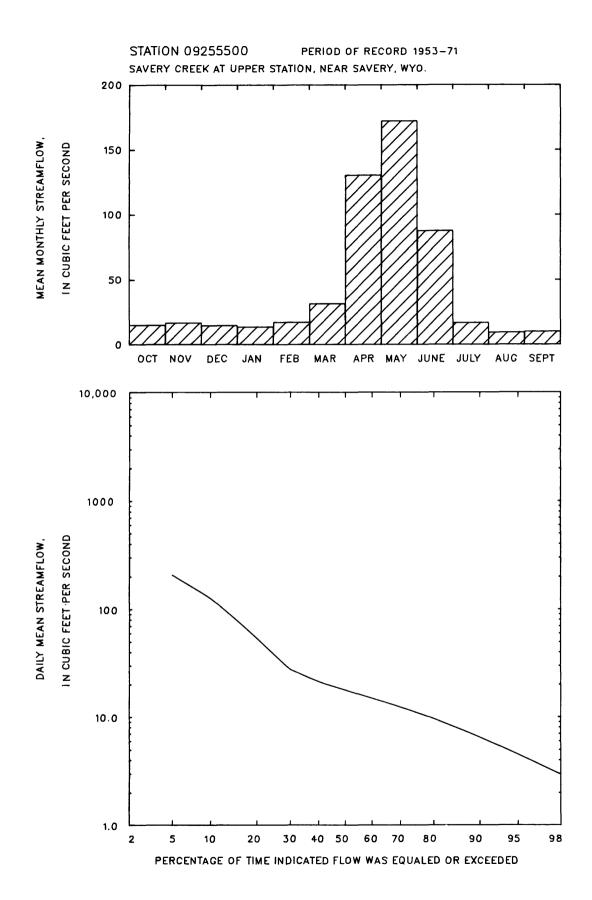
Weighted skew = -0.130

Magnitude and probability of annual high flow based on period of record 1953-71

Period (con-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedance probability, in percent											
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%						
1	332	572	758	1020								
3	302	522	692	932								
7	276	458	584	744								
15	239	369	445	530								
30	199	302	364	433								
6 0	160	237	284	338								
90	127	186	222	263								

Duration of daily mean flow for period of record 1953-71

Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
371	206	127	79	54	27	21	17	15	12	9.6	6.4	4.5	2.9	1.8	1.3	0.80



09256000 SAVERY CREEK NEAR SAVERY, WYO.

LOCATION.--Lat 41°05'52", long 107°22'53", in NW\xNW\xSW\x sec.14, T.13 N., R.89 W., Carbon County, on left bank at downstream side of bridge on county road, 0.2 mi upstream from Big Gulch, 1.7 mi downstream from Loco Creek, and 6.1 mi northeast of Savery.

DRAINAGE AREA. -- 330 mi2.

PERIOD OF RECORD. --October 1941 to September 1946, October 1947 to September 1971, April to September 1972.

GAGE.--Water-stage recorder. Altitude of gage is 6,680 ft, from topographic map. Prior to November 17, 1946, water-stage recorder at site 300 ft to right (on abandoned channel) at different datum.

REMARKS.--Diversions above station for irrigation of about 780 acres, of which about 140 acres are below station.

Transbasin diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft³/s May 4, 1952, gage height, 7.30 ft, from rating curve extended above 1,100 ft³/s on basis of slope-area measurement of peak flow; no flow September 1-2, 8-10, 1959, August 7, 10-22, September 15-16, 1960.

Monthly and annual streamflow 1942-46, 1948-71

Magnitude and probability of annual low flow based on period of record 1943-46, 1949-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	42	5.4	22	10	0.48	1.8
November	48	11	26	9.9	0.38	2.1
December	42	8.9	25	8.3	0.34	2.0
January	36	8.7	24	7.9	0.32	2.0
February	72	11	30	12	0.39	2.4
March	136	18	51	25	0.48	4.1
April	694	94	261	152	0.58	21.0
May	1220	146	490	258	0.53	39.5
June	560	51	254	159	0.63	20.5
July	97	2.5	36	27	0.75	2.9
August	41	1.3	11	9.6	0.86	0.9
September	43	1.0	11	9.2	0.85	0.9
Annual	207	40	104	40	0.39	100

Period (con-		Discharge recurrenc on-exceed	é interv	al, in y	ears, and	i
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.7	0.39	0.00	0.00	0.00	
3	2.8	0.44	0.00	0.00	0.00	
7	3.0	0.70	0.15	0.00	0.00	
14	3.6	0.85	0.19	0.00	0.00	
30	4.7	1.8	1.0	0.65	0.37	
60	6.8	3.1	2.0	1.4	0.95	
90	9.9	5.3	3.8	2.9	2.1	
120	13	7.9	6.0	4.8	3.7	
183	17	11	8.9	7.3	5.9	

Magnitude and probability of instantaneous peak flow based on 30 years of record

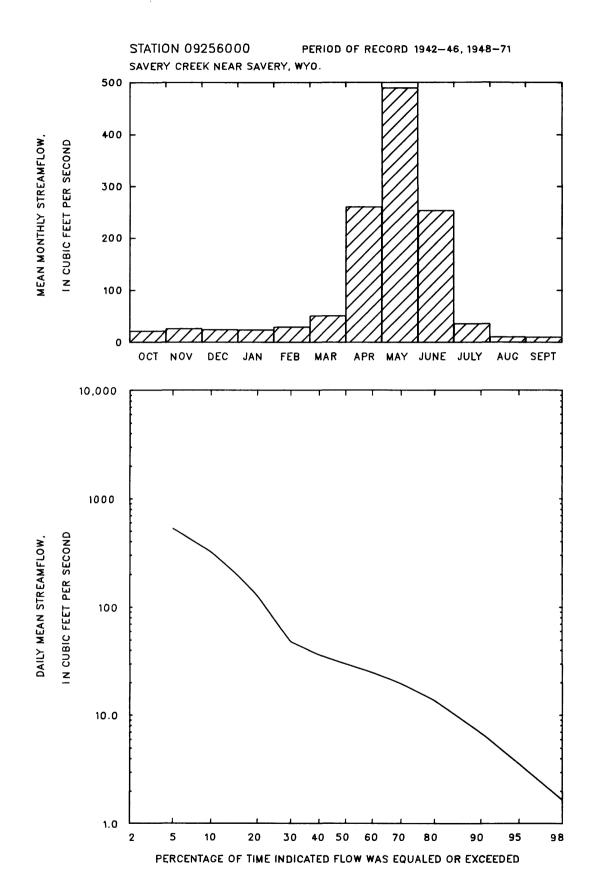
	e, in ft ³ , ars, and				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
1170	1650	1950	2300	2540	2760

Magnitude and probability of annual high flow based on period of record 1942-46, 1948-71

Period (con- secu-		Discharg recurren exceedan	cé inter	val, in	years, a	nd
tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	950	1370	1610	1850	2010	
3	834	1250	1490	1770	1950	
7	741	1140	1370	1650	1830	
15	617	955	1180	1440	1640	
30	519	784	954	1160	1300	
60	414	610	731	873	971	
90	325	465	551	652	722	

Duration of daily mean flow for period of record 1942-46, 1948-71

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1000	526	320	199	127	48	36	30	25	19	14	6.8	3.6	1.7	0.74	0.37	0.05



09257000 LITTLE SNAKE RIVER NEAR DIXON, WYO.

LOCATION.--Lat 41°01'42", long 107°32'55", in SE\NW\ sec.8, T.12 N., R.90 W., Carbon County, on left bank 200 ft upstream from highway bridge, 1,000 ft upstream from Willow Creek, and 0.8 mi west of Dixon.

DRAINAGE AREA. -- 988 mi2.

PERIOD OF RECORD. -- May 1910 to September 1923, March 1938 to current year (no winter records since 1971). Monthly discharge only for some periods; published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft. May 27, 1910, to September 30, 1923, non-recording gage on highway bridge 200 ft downstream at datum 2.98 ft higher. March 15, 1938, to September 30, 1957, water-stage recorder at site 225 ft downstream at datum 2.98 ft higher; October 1, 1957, to June 6, 1968, at site 850 ft downstream at present datum, and June 7 to September 30, 1968, at site 225 ft downstream at present datum.

REMARKS.--Diversions for irrigation of about 9,500 acres above station. One diversion above station for irrigation of about 3,000 acres below. Transbasin diversions above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 13,000 ft³/s, May 16, 1984, gage height, 13.56 ft, result of dam failure; no flow September 19-20, 22, 1977, August 7, 17-18, 27-29, 1981.

Monthly and annual streamflow 1911-23, 1939-71

Magnitude and probability of annual low flow based on period of record 1912-23, 1940-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	282	6.2	79	62	0.78	1.3
November	245	36	94	41	0.44	1.5
December	16 0	45	89	25	0.28	1.4
January	130	37	85	22	0.25	1.4
February	433	48	101	54	0.53	1.6
March	744	83	215	130	0.61	3.5
April	1990	298	879	446	0.51	14.3
May	5700	1070	2560	950	0.37	41.5
June	4040	217	1830	972	0.53	29.7
July	1160	5.2	175	219	1.3	2.8
August	198	1.6	28	42	1.5	0.4
September	105	0.78	27	28	1.0	0.4
Annual	930	212	514	171	0.33	100

Period (con-		recurren	ce inter	val, in	indicate years, an y, in per	ıd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	3.4	0.95	0.49	0.28	0.15	0.10
3	3.8	1.1	0.60	0.36	0.20	0.13
7	4.4	1.4	0.78	0.49	0.29	0.2
14	5.2	1.8	1.0	0.69	0.44	0.3
30	6.7	2.3	1.4	0.92	0.59	0.4
60	10	3.7	2.2	1.4	0.87	0.6
90	18	6.7	3.9	2.4	1.4	1.0
120	33	14	8.6	5.7	3.5	2.5
183	53	33	26	21	17	15

Magnitude and probability of instantaneous peak flow based on 52 years of record

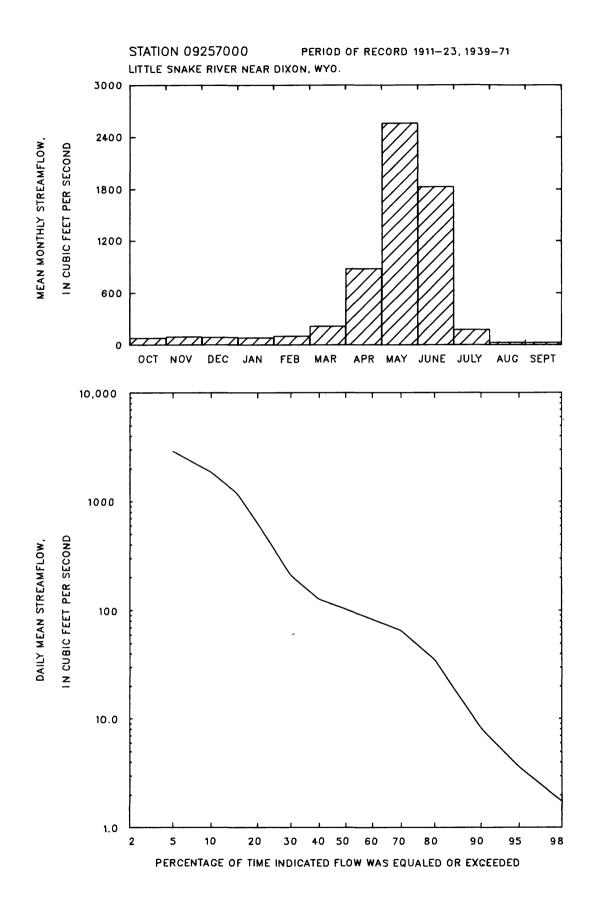
Discharge, in ft3/s, for indicated recurrence interval in years, and exceedance probability, in percent 25 4% 100 50 20% 50% 2% 10% 1% 4670 6160 7080 8160 8930 9660 Weighted skew = -0.209

Magnitude and probability of annual high flow based on period of record 1911-23, 1939-71

Period (con-		recurren	e, in ft ce inter ce proba	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	4080	5410	6210	7120	7750	8340
3	3860	5150	5930	6830	7440	8020
7	3550	4780	5520	6370	6950	7500
15	3190	4320	5000	5800	63 6 0	6890
30	2820	3830	4450	5200	5740	6250
60	2260	3040	3510	4060	4440	4790
90	1750	2320	2640	3010	3250	3470

Duration of daily mean flow for period of record 1911-23, 1939-71

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
4870	2870	1860	1190	627	208	125	102	82	6 5	35	8.1	3.6	1.7	1.2	0.88	0.44



09258000 WILLOW CREEK NEAR DIXON, WYO.

LOCATION.--Lat 40°54'56", long 107°31'16", on line between secs.8 and 17, T.11 N., R.90 W., Moffat County, Colo., on right bank 6.2 mi south of Colorado-Wyoming State line, 8.0 mi upstream from mouth, and 8.3 mi south of Dixon.

DRAINAGE AREA. -- 24 mi², approximately.

PERIOD OF RECORD. -- October 1953 to current year.

GAGE. -- Water-stage recorder. Altitude of gage is 6,700 ft, from topographic map.

REMARKS. -- One small ditch diverts water above station for irrigation. Regulation by Elk Lake, capacity, 400 acre-ft. EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 476 ft³/s, May 10, 1984, gage height, 6.02 ft, from rating curve extended above 160 ft³/s; maximum gage height, 7.08 ft, April 18, 1984 (backwater from ice); no flow September 17-19, 1955, for many days July to September 1977, and August 8-16, 1982.

Monthly and annual streamflow 1954-84

Magnitude and probability of annual low flow based on period of record 1955-84

in percent

100

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1%

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		Discharge recurrence on-exceed	é interv	al, in y	ears, an	d
							tive days)	2 50%	5 20 %	10 10%	20 5%	50 2%	
October 0	8.7	1.2	3.0	1.6	0.52	2.4							
November	5.8	1.1	2.5	1.1	0.43	2.0							
December	5.0	0.83	2.4	0.99	0.41	1.9	1	0.56	0.11	0.00	0.00	0.00	
January	8.0	0.39	2.5	1.4	0.54	2.0	3	0.67	0.14	0.00	0.00	0.00	
February	5.6	0.51	2.7	1.1	0.43	2.1	7	0.91	0.22	0.00	0.00	0.00	
March	15	1.7	5.2	3.1	0.60	4.1	14	1.0	0.51	0.22	0.00	0.00	
April	38	5.0	19	9.6	0.50	15.2	30	1.5	0.81	0.53	0.35	0.20	
May	114	7.2	35	21	0.59	27.5	60	1.9	1.1	0.69	0.44	0.25	
June	75	5.4	37	16	0.45	29.0	90	1.9	1.3	0.99	0.79	0.61	
July	38	3.3	11	8.9	0.78	9.1	120	2.0	1.5	1.2	1.0	0.85	
August	6.5	0.16	3.5	1.5	0.44	2.8	183	2.3	1.7	1.4	1.2	1.0	
September	8.4	0.15	2.5	1.5	0.62	2.0							
Annual	25	2.6	11	4.6	0.44	100							

Magnitude and probability of instantaneous peak flow based on 30 years of record

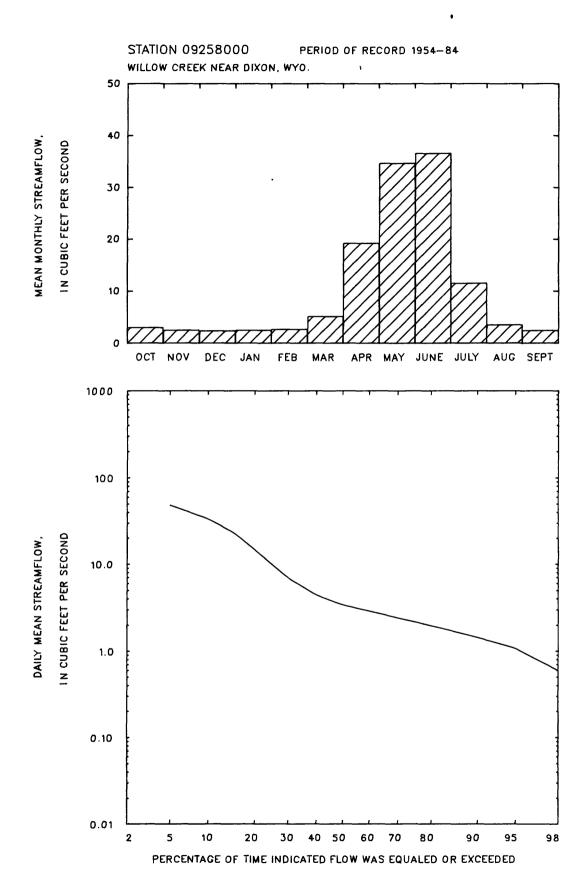
Discharge, in ft3/s, for indicated recurrence interval in years, and exceedance probability, in percent 10 50 100 20% 50% 10% 4% 2% 1% 156 250 314 394 454 513 Weighted skew = -0.338

Magnitude and probability of annual high flow based on period of record 1954-84

Period (con-		recurre	ge, in fi nce inter nce proba	rval, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	81	127	155	189	212	
3	69	107	131	159	178	
7	58	87	106	127	143	
15	51	74	86	99	107	
30	43	61	71	82	89	
60	36	52	61	71	77	
90	30	44	53	61	67	

Duration of daily mean flow for period of record 1954-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded	for indi	cated	percent	age of	time		
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
80	48	33	23	15	6.9	4.4	3.4	2.9	2.4	2.0	1.4	1.1	0.59	0.29	0.09	0.00



10010400 EAST FORK BEAR RIVER NEAR EVANSTON, WYO.

LOCATION.--Lat 40°52'25", long 110°47'00", in SE4SE4SW4 sec.26, T.2 N., R.10 E., Summit County, Utah, Wasatch National Forest, on right bank 4.1 mi upstream from mouth, 11.5 mi upstream from Utah-Wyoming State line, and 28.7 mi south of Evanston.

DRAINAGE AREA. -- 34.6 mi2.

PERIOD OF RECORD. -- October 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,760 ft, from topographic map.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 857 ft3/s, June 18, 1983, gage height, 4.33 ft; minimum, 4.5 ft3/s, April 17, 1980.

Monthly and annual streamflow 1974-84

Magnitude and probability of annual low flow based on period of record 1975-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	cé inter	val, in	indicate years, an y, in pen	nd
	(20 / 5)						tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	59	12	22	14	0.64	3.2							
November	27	10	16	5.3	0.34	2.3							
December	19	6.0	11	3.8	0.34	1.6	1	6.9	5.8	5.3	4.8		
January	15	6.0	9.3	2.5	0.27	1.4	3	7.2	6.1	5.6	5.2		
February	13	6.0	9.0	2.0	0.22	1.3	7	7.4	6.4	5.9	5.5		
March	19	6.9	11	3.6	0.33	1.6	14	7.6	6.5	6.1	5.7		
April	32	9.3	20	7.2	0.35	3.0	30	8.0	6.7	6.2	5.8		
May	217	32	109	56	0.52	16.0	60	8.4	7.0	6.4	6.0		
June	410	154	269	80	0.30	39.4	90	8.8	7.4	6.7	6.2		
July	334	39	136	90	0.66	20.0	120	9.4	7.7	6.9	6.4		
August	74	21	41	22	0.53	6.1	183	11	9.2	8.5	8.1		
September	6 5	13	28	18	0.65	4.1						-	
Annual	81	31	57	17	0.29	100							

0	8.0	6.7	6.2	5.8	
0	8.4	7.0	6.4	6.0	
0	8.8	7.4	6.7	6.2	
0	9.4	7.7	6.9	6.4	
3	11	9.2	8.5	8.1	

Magnitude and probability of instantaneous peak flow based on --- years of record

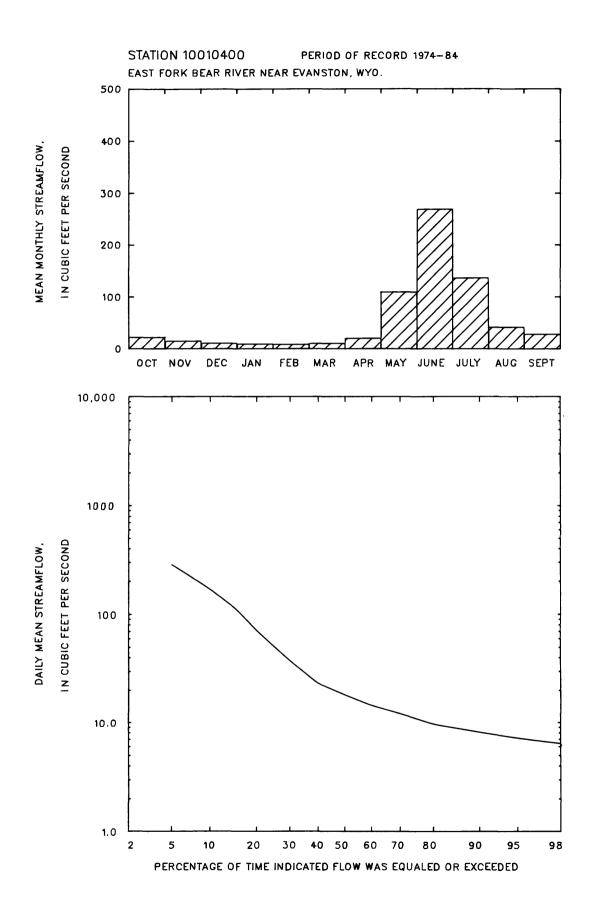
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1974-84

Period (con-		recurre	nce inter	ft ³ /s, f c rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10 %	25 4%	50 2%	100 1%
1	468	574	629			
3	443	547	604			
7	400	506	569			
15	358	457	514			
30	302	383	426			
60	227	294	330			
90	176	226	252			

Duration of daily mean flow for period of record 1974-84

		Dis	charge,	in ft ³	/s, whi	.ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
455	283	169	111	71	37	23	18	14	12	9.5	8.0	7.1	6.3	6.0	5.9	5.5



10011200 WEST FORK BEAR RIVER AT WHITNEY DAM, NEAR OAKLEY, UTAH

LOCATION.--Lat 40°50'30", long 110°55'35", in NE½ sec.9, T.1 N., R.9 E., Summit County, Utah, Wasatch National Forest, on left bank 1,380 ft downstream from Whitney Dam, 7 mi upstream from Deer Creek, and 21.5 mi northeast of Oakley. DRAINAGE AREA. -- 6.79 mi2.

PERIOD OF RECORD .-- October 1963 to current year. Prior to October 1965, published as "at Whitney Dam Site".

GAGE. -- Water-stage recorder and concrete control with V-notch sharp-crested weir since August 4, 1966. Altitude of gage is 9,120 ft, from topographic map.

REMARKS. -- Flow regulated by Whitney Reservoir, total capacity, 4,700 acre-feet, since July 1966.

EXTREMES FOR PERIOD OF RECORD .-- Maximum discharge, 145 ft3/s, June 13, 1965; maximum gage height, 3.08 ft, June 26, 1967; no flow July 24 to September 30, November 16-29, 1966.

Monthly and annual streamflow 1967-84

Magnitude and probability of annual low flow based on period of record 1968-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	ce inter	3/s, for val, in yobability	years, a	nd
							tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	26	0.02	6.2	8.9	1.4	6.3							
November	6.3	0.01	1.9	1.5	0.79	1.9							
December	3.9	0.40	1.4	0.86	0.61	1.4	1	0.30	0.16	0.11	0.08		
January	3.8	0.25	1.3	0.80	0.59	1.4	3	0.31	0.16	0.11	0.09		
February	3.3	0.19	1.3	0.68	0.54	1.3	7	0.34	0.18	0.12	0.09		
March	2.4	0.34	1.2	0.56	0.45	1.3	14	0.40	0.20	0.13	0.09		
April	2.7	0.33	1.4	0.59	0.43	1.4	30	0.62	0.29	0.19	0.12		
May	19	0.27	2.8	4.2	1.5	2.8	60	0.85	0.45	0.30	0.21		
June	56	0.79	23	19	0.82	23.9	90	1.1	0.60	0.41	0.29		
July	49	3.6	24	14	0.56	24.7	120	1.1	0.65	0.47	0.35		
August	23	3.2	9.4	5.4	0.58	9.6	183	1.7	0.92	0.69	0.54		
September	69	1.5	24	17	0.70	24.0							
Annual	15	2.1	8.2	3.3	0.40	100							

Magnitude and probability of annual high flow based on period of record 1967-84

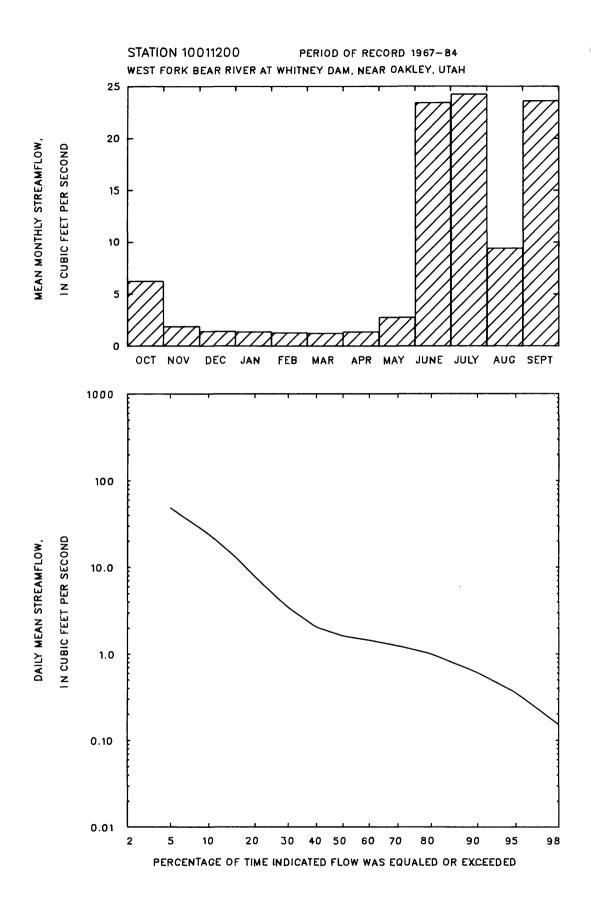
Magnitude	and I	probabi	lity of	insta	ntaneous	peak	110W	
	bas	sed on	year	s of	record			
			,					

2	5	10	25	50	100
0%	20%	10%	4%	2%	1

Period (con-		recurre	ncé inte	t ³ /s, for rval, in ability,	years,	and
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	96	111	114	114		
3	91	108	111	113		
7	84	104	108	110		
15	68	86	91	92		
30	45	57	60	62		
60	30	38	41	42		
90	25	33	36	38		

Duration of daily mean flow for period of record 1967-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded	for ind	icated	percent	age of	time		
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
90	48	24	13	7.7	3.4	2.0	1.6	1.4	1.2	0.99	0.60	0.35	0.15	0.10	0.02	0.00



10011400 WEST FORK BEAR RIVER BELOW DEER CREEK, NEAR EVANSTON, WYO.

LOCATION.--Lat 40°56'40", long 110°51'40", in NE\SE\NW\ sec.6, T.2 N., R.10 E., Summit County, Utah, on left bank 0.8 mi downstream from Deer Creek, 2.1 mi upstream from mouth, and 22.9 mi south of Evanston.

DRAINAGE AREA. -- 52.2 mi².

PERIOD OF RECORD. -- October 1973 to current year.

GAGE. -- Water-stage recorder. Altitude of gage is 8,190 ft, from topographic map.

REMARKS. -- Flow regulated by Whitney Reservoir, total capacity, 4,700 acre-ft, since July 1966.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft³/s, May 15, 1984, gage height, 4.20 ft; minimum, 2.0 ft³/s, August 11, 1977.

Monthly and annual streamflow 1974-84

Magnitude and probability of annual low flow based on period of record 1975-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	ce inter	³ /s, for val, in y	years, a	nd
***************************************							tive days)	2 50%	5 20%	10 10%	2 0 5%	50 2%	100 1%
October	49	7.7	18	13	0.72	3.2							
November	23	8.3	15	5.7	0.38	2.6	_						
December	21	7.7	14	4.6	0.34	2.4	1	7.1	4.6	3.5	2.7		
Januar y	16	8.0	11	3.2	0.28	2.0	3	7.2	4.8	3.6	2.8		
February	15	7.0	11	2.8	0.27	1.9	7	7.5	5.0	3.9	3.1		
March	17	7.4	11	3.5	0.31	2.0	14	8.0	5.4	4.3	3.4		
April	50	13	23	10	0.44	4.1	30	8.5	6.3	5.3	4.6		
May	298	28	153	77	0.51	26.8	60	9.4	7.6	6.9	6.4		
June	425	20	185	115	0.62	32.4	90	9.9	8.0	7.2	6.6		
July	132	12	66	32	0.48	11.6	120	10	8.4	7.5	6.9		
August	46	8.4	23	11	0.46	4.1	183	12	8.7	7.7	7.0		
September	86	7.8	40	24	0.60	7.0							
Annual	73	13	48	18	0.39	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

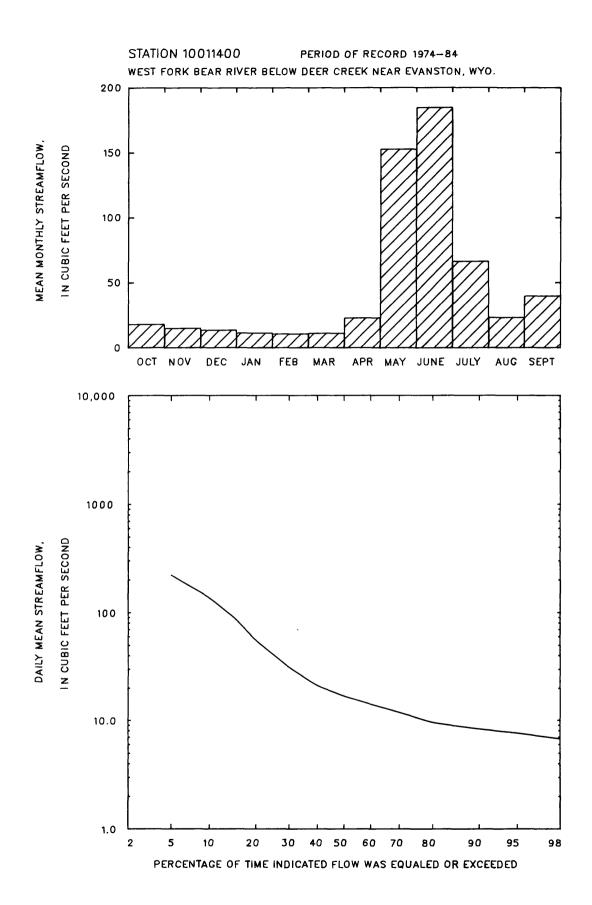
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1974-84

Period (con-		recurre	ace inte	t ³ /s, for rval, in ability,	years,	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	360	509	560			
3	336	474	523			
7	309	438	483			
15	281	400	441			
30	243	355	398			
60	183	266	298			
90	144	197	216			

Duration of daily mean flow for period of record 1974-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
390	220	137	88	55	31	21	17	14	12	9.5	8.2	7.5	6.7	5.3	4.4	2.9



10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE

LOCATION.--Lat 40°57'55", long 110°51'10", in SE\NW\SE\ sec.30, T.3 N., R.10 E., Summit County, Utah, on left bank 400 ft downstream from West Fork and 2.8 mi upstream from Utah-Wyoming State line.

DRAINAGE AREA. -- 172 mi2.

PERIOD OF RECORD. -- July 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,965 ft, from river-profile map.

REMARKS.--Flow regulated slightly by Whitney Reservoir, total capacity, 4,700 acre-ft, since 1966. Three diversions above station for irrigation of about 265 acres above and 2,600 acres below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,980 ft³/s, June 6, 1968, gage height, 3.79 ft; maximum gage height, 4.28 ft, June 19, 1983; minimum, 6.8 ft³/s, April 12, 1984, result of upstream ice jam.

Monthly and annual streamflow 1943-84

Magnitude and probability of annual low flow based on period of record 1944-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-	
							tive days)	2 50%
October	208	31	61	34	0.56	2.6		
November	106	33	53	17	0.33	2.3		
December	95	28	45	14	0.30	1.9	1	30
January	72	30	41	10	0.25	1.8	3	31
February	64	25	40	8.6	0.22	1.7	7	32
March	67	26	42	9.5	0.23	1.8	14	33
April	316	37	102	62	0.61	4.4	30	36
May	1040	162	591	191	0.32	25.4	60	37
June	1550	263	881	320	0.36	37.8	90	38
July	933	67	309	205	0.66	13.3	120	40
August	244	38	94	46	0.49	4.0	183	43
September	229	24	71	48	0.68	3.1		
Annual	312	82	194	51	0.26	100		

Period (con-	1	recurren	e, in ft ³ ce interv lance pro	al, in y	ears, an	ıd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100
1	30	25	22	20	18	17
3	31	26	23	21	19	18
7	32	26	24	22	20	19
14	33	28	25	23	21	20
30	36	30	27	25	22	21
60	37	31	29	27	25	24
90	38	32	30	28	26	25
120	40	33	31	29	27	26
183	43	36	33	31	30	29

Magnitude and probability of instantaneous peak flow based on 42 years of record

	e, in ft ³ , ars, and				
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1880	2370	2660	2970	3190	3380

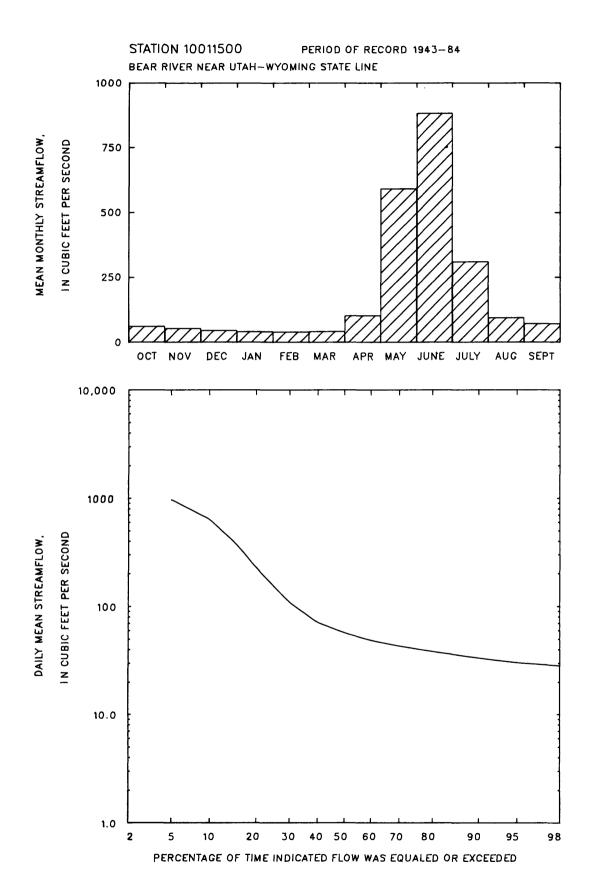
Weighted skew = -0.357

Magnitude and probability of annual high flow based on period of record 1943-84

Period (con-		Díscharg recurren exceedan	cé inter	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1540	1910	2120	2350	2510	2650
3	1430	1790	1990	2220	2370	2510
7	1310	1630	1820	2020	2160	2290
15	1160	1450	1620	1800	1920	2020
30	1020	1270	1380	1490	1560	1610
60	802	994	1080	1170	1210	1250
90	617	762	830	892	927	955

Duration of daily mean flow for period of record 1943-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1510	968	637	383	226	108	71	57	48	43	38	33	30	28	26	25	22



10012000 MILL CREEK AT UTAH-WYOMING STATE LINE

LOCATION.--Lat 40°59'30", long 110°50'30", in W_2 sec.17 T.3 N., R.10 E., Summit County, Utah, on right bank 2,000 ft upstream from State line and 19.5 mi south of Evanston, Wyo.

DRAINAGE AREA. -- 59 mi², approximately.

PERIOD OF RECORD. -- October 1949 to September 1962.

GAGE.--Water-stage recorder. Altitude of gage is 7,860 ft, from river-profile map.

REMARKS. -- Three small diversions for irrigation of hay meadows above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 690 ft³/s June 7, 1957, gage height, 4.39 ft; minimum, 0.9 ft³/s November 11, 1951, result of freezeup.

Monthly and annual streamflow 1950-62

Magnitude and probability of annual low flow based on period of record 1951-62

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	:	recurren	e, in ft ce inter dance pro	val, in y	years, a	nd
	(It-/s)	(IL-/S)	(10-78)	(11-75)	ation		secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	17	5.8	9.5	3.7	0.39	2.5							
November	14	6.5	9.1	2.1	0.24	2.4							
December	11	5.6	8.4	1.9	0.22	2.2	1	3.7	2.6	2.2	1.9		
January	9.9	5.3	7.8	1.4	0.18	2.0	3	3.9	2.8	2.4	2.1		
February	10	5.5	8.1	1.2	0.15	2.1	7	4.2	3.1	2.7	2.3		
March	13	6.0	9.4	1.7	0.18	2.5	14	4.5	3.5	3.1	2.8		
April	64	14	35	17	0.48	9.1	30	5.0	3.9	3.5	3.2		
May	243	76	134	46	0.34	35.0	60	5.8	4.5	4.0	3.7		
June	329	26	127	86	0.67	33.2	90	6.5	5.2	4.7	4.3		
July	56	4.1	20	15	0.74	5.2	120	7.1	5.9	5.3	4.9		
August	14	3.9	8.2	3.8	0.46	2.1	183	7.8	6.3	5.7	5.2		
September	12	3.8	6.8	2.5	0.37	1.8							
Annual	52	18	32	11	0.33	100							

Magnitude and probability of instantaneous peak flow based on 19 years of record

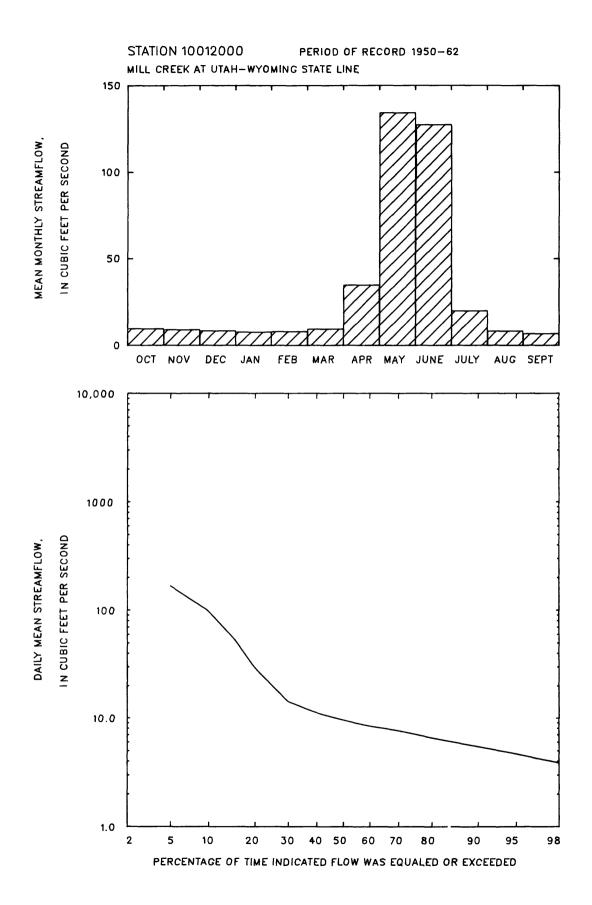
	e, in ft ³ ars, and				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
391	544	642	760	845	927

Magnitude and probability of annual high flow based on period of record 1950-62

Period (con-		recurre	ice inte	t ³ /s, for rval, in ability,	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	301	401	456			
3	284	378	431			
7	256	342	392			
15	212	288	335			
30	172	236	278			
60	127	176	209			
90	96	133	158			

Duration of daily mean flow for period of record 1950-62

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
307	166	98	54	29	14	11	9.5	8.3	7.6	6.5	5.4	4.6	3.8	3.3	2.9	2.3



10014000 BEAR RIVER ABOVE SULPHUR CREEK, NEAR EVANSTON, WYO.

LOCATION .-- Lat 41°08', long 110°53', in NWanea sec. 6 T.13 N., R.119 W., Uinta County, on right bank 2 mi upstream from Myers bridge, 5.75 mi upstream from Sulphur Creek, and 9.5 mi southeast of Evanston.

DRAINAGE AREA. -- 282 mi².

PERIOD OF RECORD. -- October 1946 to September 1956.

GAGE.--Water-stage recorder. Altitude of gage is 7,130 ft, from river-profile map. Prior to October 1, 1953, at site 1,200 ft downstream at different datum.

REMARKS. -- Diversions for irrigation of about 19,000 acres above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 2,970 ft3/s June 14, 1953, gage height, 5.73 ft, site and datum then in use; minimum, 3.6 ft³/s September 19, 1956.

Monthly and annual streamflow 1947-56

Magnitude and probability of annual low flow based on period of record 1948-56

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-	:	Discharge recurrence on-exceed	e interv	al, in	years, a	nd
					-		tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	118	17	49	30	0.61	2.0							
November	89	29	5 8	20	0.35	2.4							
December	89	41	63	16	0.25	2.6	1	11	5. 9	4.4			
January	73	40	56	9.9	0.18	2.3	3	11	6.3	4.7			
February	68	40	55	7.8	0.14	2.3	7	12	7.0	5.2			
March	174	43	81	37	0.46	3.3	14	15	8.0	5.9			
April	380	102	226	87	0.39	9.3	30	18	10	7.3			
May	1260	362	789	261	0.33	32.5	60	24	14	10			
June	1310	177	823	362	0.44	33.9	90	29	17	13			
July	310	. 21	153	113	0.73	6.3	120	35	22	17			
August	124	9.7	49	40	0.81	2.0	183	44	31	26			
September	49	8.5	25	17	0.67	1.0							
Annual	313	105	202	62	0.31	100							

Magnitude and probability of instantaneous peak flow based on 10 years of record

	e, in ft ³ , ars, and				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
1910	2350	2600	2890	3080	3270

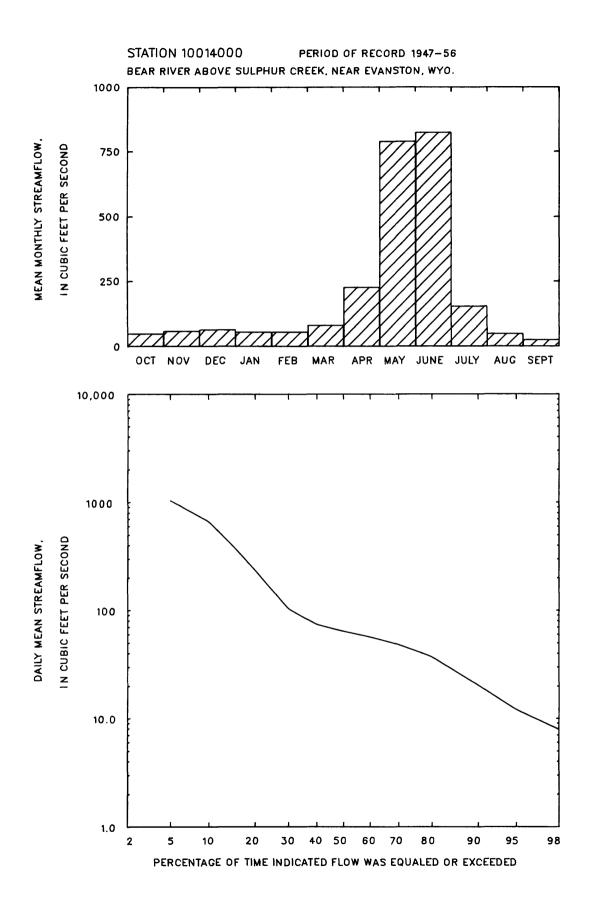
Weighted skew = -0.229

Magnitude and probability of annual high flow based on period of record 1947-56

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1720	2100	2300			
3	1630	2020	2210			
7	1490	1860	2030			
15	1300	1610	1770			
30	1090	1360	1490			
60	840	1060	1170			
90	638	821	917			

Duration of daily mean flow for period of record 1947-56

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated 1	percenta	ge of	time		
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1660	1030	661	381	234	102	73	63	57	48	37	20	12	7.8	6.6	5.8	5.0



10015700 SULPHUR CREEK ABOVE RESERVOIR, NEAR EVANSTON, WYO.

LOCATION.--Lat 41°08'38", long 110°48'19", in NE\SE\SW\ sec.35, T.14 N., R.119 W., Uinta County, on right bank 1.2 mi downstream from Willow Creek, 2 mi upstream from Sulphur Creek Dam, and 11.5 mi southeast of Evanston.

DRAINAGE AREA.--64.2 mi².

PERIOD OF RECORD.--October 1957 to current year. Monthly discharge only for October and November 1957; published in WSP 1734.

GAGE .-- Water-stage recorder. Altitude of gage is 7,180 ft, from topographic map.

REMARKS. -- Several diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft³/s, June 1, 1983, gage height, 9.10 ft, from rating curve extended above 1,200 ft³/s, on basis of slope-area measurement of peak flow (flood was result of released water from temporary blockage of upstream road culverts); no flow at times most years.

Monthly and annual streamflow 1974, 1958-84

Magnitude and probability of annual low flow based on period of record 1959-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu- tive
							days)
October	15	0.14	3.5	4.4	1.2	1.6	
November	12	0.34	4.4	4.2	0.94	2.0	
December	11	0.20	3.9	2.9	0.75	1.8	1
January	7.9	0.40	3.8	2.2	0.58	1.7	3
February	15	0.97	4.9	2.8	0.57	2.2	7
March	40	2.1	16	14	0.87	7.2	14
April	123	7.7	53	27	0.50	23.9	30
May	324	5.2	86	73	0.85	38.6	60
June	160	0.89	36	34	0.94	16.2	90
July	20	0.06	5.8	5.6	0.96	2.6	120
August	17	0.00	2.6	4.4	1.7	1.2	183
September	12	0.00	2.5	4.0	1.6	1.1	
Annual	46	1.8	19	11	0.60	100	

Period (con-		recurren	ce inter	3/s, for val, in y obability	years, ai	ıd
tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00		
14	0.03	0.00	0.00	0.00		
30	0.05	0.00	0.00	0.00		
60	0.25	0.00	0.00	0.00		
90	0.55	0.13	0.06	0.04		
120	0.91	0.27	0.14	0.09		
183	1.8	0.64	0.37	0.23		

Magnitude and probability of instantaneous peak flow based on 27 years of record

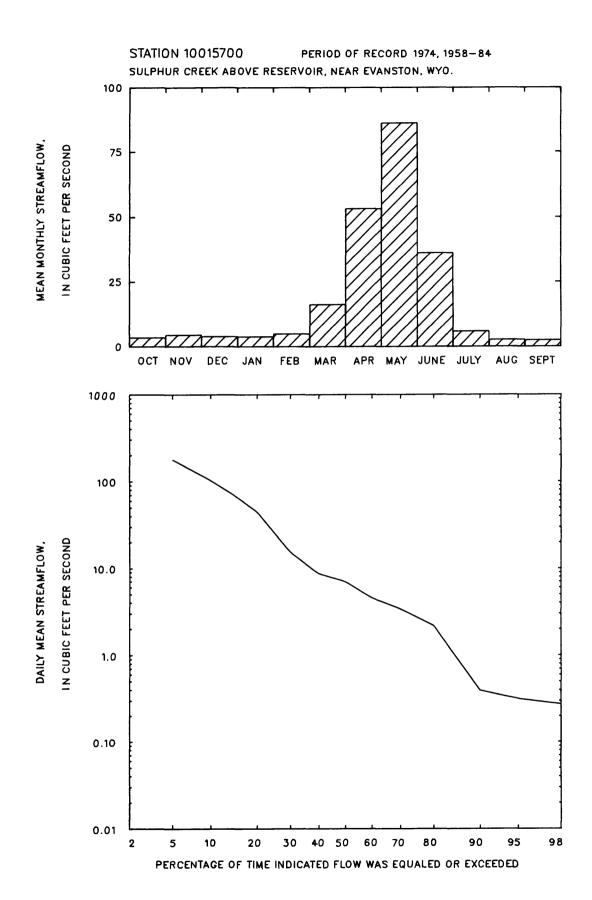
				recurrence lity, in p	
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
409	811	1190	1840	2450	3210

Magnitude and probability of annual high flow based on period of record 1974, 1958-84

Period (con-		Discharge, in ft ³ /s, for indicated recurrence interval, in years, and exceedance probability, in percent										
secu- tive	2	5	10	25	50	100						
days)	50%	20%	10%	4%	2%	1%						
1	221	367	459	566								
3	188	310	381	457								
7	143	251	326	420								
15	111	200	261	336								
30	89	159	204	255								
60	67	119	152	189								
90	54	92	114	137								

Duration of daily mean flow for period of record 1974, 1958-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eed e d	for ind	icated	percent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
356	176	102	66	45	15	8.5	6.9	4.5	3.4	2.2	0.39	0.31	0.27	0.25	0.25	0.24



10015900 SULPHUR CREEK BELOW RESERVOIR, NEAR EVANSTON, WYO.

LOCATION.--Lat 41°09'21", long 110°50'05", in SE\SE\SE\SE\ sec.28, T.14 N., R.119 W., Uinta County, on left bank 400 ft downstream from Sulphur Creek Dam, 6.3 mi upstream from mouth, and 10.5 mi southeast of Evanston.

DRAINAGE AREA. -- 69.2 mi2.

PERIOD OF RECORD. -- April 1958 to current year.

GAGE. -- Water-stage recorder and concrete V-notch control. Altitude of gage is 7,120 ft, from topographic map.

REMARKS.--Flow regulated by Sulphur Creek Reservoir, capacity, 7,100 acre-ft. Records prior to 1965 do not include flow over spillway of dam.

EXTREMES FOR PERIOD OF RECORD (SINCE 1966).--Maximum daily discharge, 740 ft³/s, May 15, 1984; no flow at times each year except 1972.

Monthly and annual streamflow 1965-83

Magnitude and probability of annual low flow based on period of record 1966-83

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu- tive	
							days)	50%
October	66	0.00	12	17	1.5	4.0		
November	48	0.00	7.1	13	1.8	2.4		
December	25	0.00	3.9	6.8	1.7	1.3	1	0.00
Jan uary	12	0.00	2.6	3.9	1.5	0.9	3	0.00
February	29	0.00	4.4	8.7	2.0	1.5	7	0.00
March	87	0.00	17	22	1.3	5.6	14	0.00
April	107	0.00	45	31	0.68	15.1	30	0.00
May	210	0.00	81	60	0.74	27.1	60	0.00
June	217	6.4	50	47	0.96	16.6	90	0.00
July	51	2.1	25	12	0.48	8.5	120	0.00
August	52	3.9	28	14	0.50	9.5	183	0.50
September		0.05	22	13	0.60	7.5		
Annual	57	3.9	25	12	0.49	100		

Period (con-	r	ischarge ecurrenc n-exceed	e interv	al, in y	ears, ar	ad
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00				
3	0.00	0.00				
7	0.00	0.00				
14	0.00	0.00				
30	0.00	0.00				
60	0.00	0.00				
90	0.00	0.00				
120	0.00	0.00				
183	0.50	0.00				

Magnitude and probability of instantaneous peak flow based on --- years of record

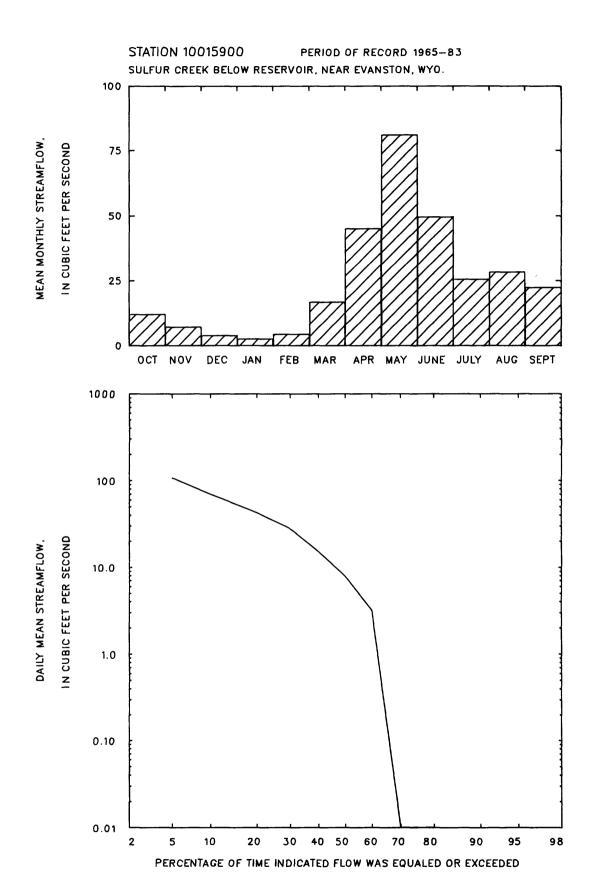
			ndicated r e probabil		e interval percent
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%

Magnitude and probability of annual high flow based on period of record 1965-83

Period (con-		recurre	ncé inter	t ³ /s, for rval, in ability,	years, a	and
tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	154	261				
3	145	238				
7	132	212				
15	116	183				
30	97	154				
60	73	116				
90	59	90				

Duration of daily mean flow for period of record 1965-83

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or ex	ceeded	for ind	icated p	percent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
222	107	69	53	42	28	15	7.8	3.2	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00



10016000 SULPHUR CREEK NEAR EVANSTON, WYO.

LOCATION.--Lat 41°10', long 110°52', in SE% sec.29, T.14 N., R.119 W., Uinta County, on left bank 4.8 mi upstream from mouth and 9 mi southeast of Evanston.

DRAINAGE AREA. -- 80.5 mi².

PERIOD OF RECORD.--April 1942 to September 1959. Fragmentary prior to July 1942.

GAGE.--Water-stage recorder. Altitude of gage is 7,070 ft, from river-profile map. Prior to June 16, 1948, at datum 2.00 ft higher. June 16, 1948, to August 21, 1952, at datum 1.00 ft higher.

REMARKS.--Several diversions for irrigation above station. Flow regulated by Sulphur Creek Reservoir (capacity, about 4,600 acre-ft) since December 1957.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,220 ft³/s April 23, 1952; maximum gage height, 6.01 ft April 21, 1948, present datum; no flow September 10, 1949.

Monthly and annual streamflow 1947-57

Magnitude and probability of annual low flow based on period of record 1948-57

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	ge, in ft ace interedance pro	val, in y	ears, a	ıd
	(10 / 5)	(10 / 0)	(10 / 0)	(10 / 0)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	11	0.32	2.9	2.9	1.0	1.0							
November	7.9	0.93	4.2	2.3	0.56	1.4							
December	18	1.0	5.3	4.7	0.88	1.8	1	0.54	0.24	0.14	0.09		
January	11	1.0	4.5	3.0	0.67	1.5	3	0.62	0.31	0.20	0.13		
February	10	1.3	6.3	3.1	0.50	2.2	7	0.73	0.38	0.24	0.15		
March	77	3.2	22	22	0.99	7.5	14	0.82	0.45	0.28	0.17		
April	242	31	99	65	0.66	33.9	30	1.0	0.54	0.34	0.21		
May	193	23	75	51	0.68	25.7	60	1.3	0.66	0.43	0.29		
June	136	11	49	36	0.73	17.0	90	1.7	0.82	0.55	0.38		
July	37	2.1	15	12	0.79	5.3	120	2.2	1.1	0.75	0.53		
August	17	0.40	6.6	6.3	0.96	2.3	183	2.9	1.6	1.1	0.77		
September	2.0	0.22	1.2	0.58	0.47	0.4							····
Annual	49	13	24	11	0.46	100							

Magnitude and probability of instantaneous peak flow based on 17 years of record

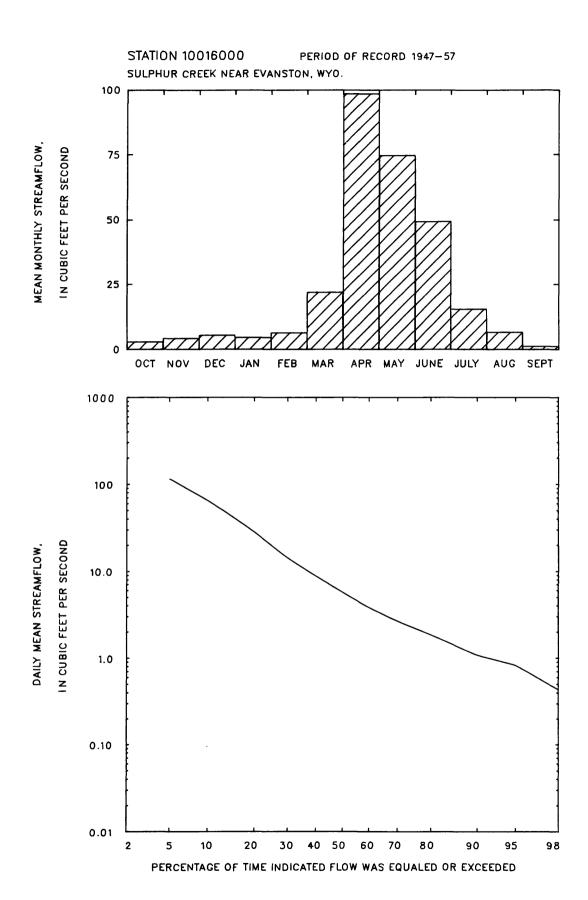
			ndicated : e probabil		
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
519	784	956	1170	1320	1470

Magnitude and probability of annual high flow based on period of record 1947-57

Period (con-		recurre	ice inte	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 1 0%	25 4%	50 2%	100 1%
1	333	507	631			
3	279	451	574			
7	218	365	480			
15	149	252	344			
30	101	169	231			
60	81	130	170			
90	67	103	131			

Duration of daily mean flow for period of record 1947-57

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated j	percent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
277	115	65	42	28	14	8.7	5.6	3.7	2.6	1.8	1.1	0.82	0.43	0.23	0.17	0.11



10017000 YELLOW CREEK NEAR EVANSTON, WYO.

LOCATION.--Lat 41°08'39", long 111°03'08", in NW\hat{NW\hat{k}NW\hat{k}} sec.28, T.5 N., R.8 E., Summit County, Utah, on left bank 600 ft downstream from Sage Creek, 1.5 mi upstream from Coyote Creek, 1.8 mi downstream from Barker Dam, and 9.8 mi southwest of Evanston.

DRAINAGE AREA. -- 79.2 mi2.

PERIOD OF RECORD.--October 1944 to September 1945, October 1949 to September 1978. Records for February 1943 to September 1944 at site 1.2 mi downstream not equivalent, but would be equivalent by adding flow of Wright No. 2 Canal and Cook Canal.

GAGE.--Water-stage recorder. Altitude of gage is 6,920 ft, from river-profile map. October 1, 1944, to September 30, 1945, at site 500 ft upstream, at different datums.

REMARKS.--One small diversion for irrigation of hay meadows above station. Flow regulated by Barker Reservoir, capacity, 162 acre-ft since 1959.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 477 ft³/s April 28, 1952, gage height, 7.04 ft; maximum gage height, 7.05 ft March 12, 1972 (backwater from ice); no flow at times in most years.

183

0.00

0.00

Monthly and annual streamflow 1944-45, 1950-78

Magnitude and probability of annual low flow based on period of record 1944-45, 1951-78

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	5.1	0.00	0.95	1.4	1.5	0.8
November	7.4	0.00	1.4	2.1	1.5	1.1
December	4.4	0.00	1.2	1.6	1.3	1.0
January	3.7	0.00	1.0	1.3	1.2	0.8
February	15	0.00	2.0	3.1	1.5	1.6
March	32	0.00	8.1	9.2	1.1	6.5
April	101	1.9	33	27	0.81	26.4
May	164	4.0	53	41	0.78	42.1
June	54	1.3	20	17	0.83	15.8
July	13	0.00	3.0	3.3	1.1	2.4
August	6.1	0.00	0.93	1.4	1.5	0.7
September	9.1	0.00	0.86	1.9	2.2	0.7
Annual	26	0.95	10	6.8	0.65	100

Period (con-		recurren	e, in ft ce inter dance pr	val, in y	ears, a	nd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00			
3	0.00	0.00	0.00			
7	0.00	0.00	0.00			
14	0.00	0.00	0.00			
30	0.00	0.00	0.00			
60	0.00	0.00	0.00			
90	0.00	0.00	0.00			
120	0.00	0.00	0.00			

Magnitude and probability of instantaneous peak flow based on 32 years of record

Discharge, in ft³/s, for indicated recurrence interval in years, and exceedance probability, in percent 10 50 100 20% 4% 50% 10% 2% 1% 124 214 284 385 469 559

Weighted skew = 0.006

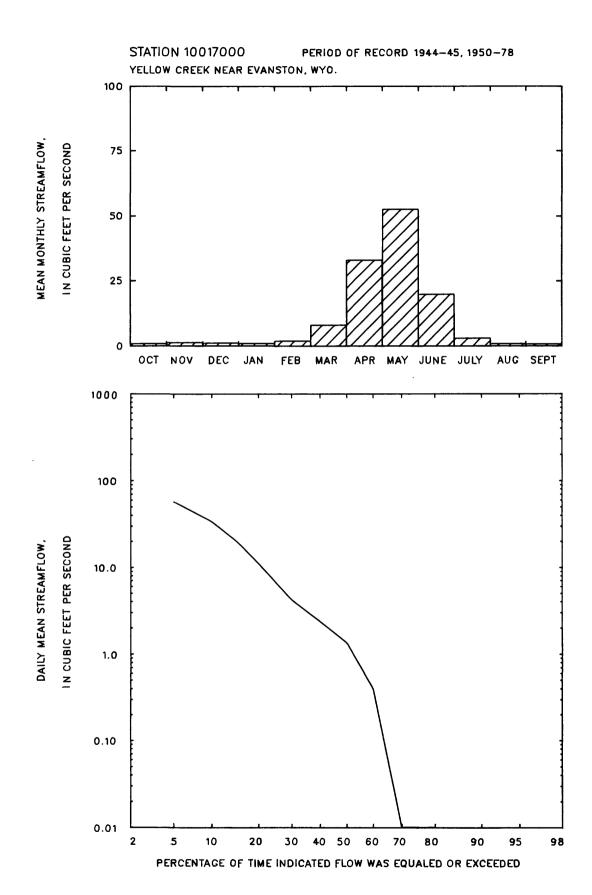
Magnitude and probability of annual high flow based on period of record 1944-45, 1950-78

0.00

Period (con-		recurre	ncé inter	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
-	106	100	2/2			
1	106 93	188 165	243 212			
3 7	93 81	144	184			
15	66	119	152			
30	52	95	122			
60	42	75	95			
90	32	58	74			

Duration of daily mean flow for period of record 1944-45, 1950-78

		Dis	charge,	in ft ³	/s, whi	ch was	equale	d or ex	ceeded :	for ind:	icated p	percent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
133	57	34	19	11	4.1	2.4	1.3	0.40	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00



10019000 BEAR RIVER NEAR EVANSTON, WYO.

LOCATION.--Lat 41°19', long 111°01', in sec.1, T.15 N., R.121 W., Uinta County, on left bank 300 ft upstream from road bridge and 3.5 mi northwest of Evanston.

DRAINAGE AREA. -- 715 mi2.

PERIOD OF RECORD.--October 1913 to September 1956. Monthly discharge only for some periods; published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 6,610 ft, from river-profile map. Prior to September 28, 1926, staff gage at same site and datum.

REMARKS.--Diversions for irrigation of about 31,000 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,690 ft 3 /s June 14, 1921, gage height, 6.35 ft, from rating curve extended above 2,700 ft 3 /s; no flow at times.

Monthly and annual streamflow 1944, 1946-56

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	125	4.7	39	33	0.85	1.4
November	102	23	62	27	0.43	2.2
December	126	38	73	26	0.36	2.6
January	102	40	66	19	0.28	2.3
February	100	43	68	17	0.25	2.4
March	339	45	138	80	0.58	4.9
April	889	232	486	231	0.47	17.3
May	1770	381	904	364	0.40	32.1
June	1450	145	816	397	0.49	29.0
July	281	5.9	120	107	0.89	4.2
August	112	0.30	30	40	1.4	1.0
September	42	0.00	12	16	1.3	0.4
Annual	420	105	234	86	0.37	100

Magnitude and probability of annual low flow based on period of record 1947-56

eriod (con-		recurren	e, in ft ³ ce interv dance pro	al, in y	ears, a	nd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	0.00	0.00	0.00			
3	0.00	0.00	0.00			
7	0.00	0.00	0.00			
14	0.21	0.00	0.00			
30	2.6	0.10	0.00			
60	6.9	1.0	0.31			
90	11	2.9	1.4			
120	19	6.4	3.5			
183	38	22	16			

Magnitude and probability of instantaneous peak flow based on 43 years of record

2		10	25	50	100
2 50%	20%	10%	25 4%	2%	1%

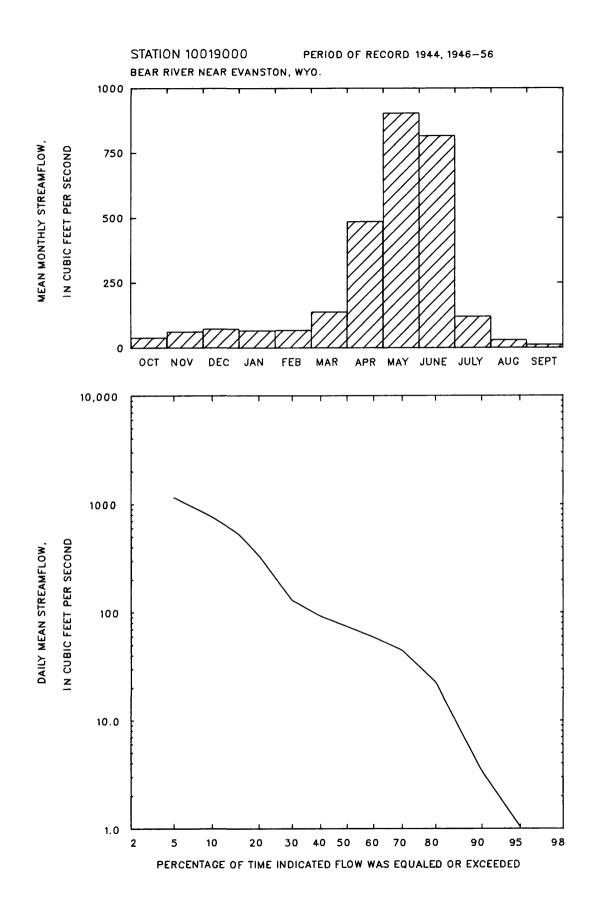
Weighted skew = -0.329

Magnitude and probability of annual high flow based on period of record 1944, 1946-56

Períod (con-			e, in ft ce inter ce proba	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100
1	1720	2200	2470			
3	1640	2140	2410			
7	1500	1970	2210			
15	1280	1730	2000			
30	1100	1470	1690			
60	894	1220	1420			
90	732	998	1150			

Duration of daily mean flow for period of record 1944, 1946-56

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1880	1150	766	536	336	129	91	74	59	45	23	3.4	1.0	0.09	0.04	0.02	0.00



10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UTAH

LOCATION.--Lat 41°26'04", long 111°01'01", in NWANWA sec.29, T.17 N., R.120 W., Uinta County, Wyo., on right bank 9.3 mi upstream from Woodruff Narrows Dam and 10 mi southeast of Woodruff.

DRAINAGE AREA. -- 752 mi².

PERIOD OF RECORD. -- October 1961 to current year.

GAGE. -- Water-stage recorder. Altitude of gage is 6,455 ft, from river-profile map.

REMARKS. -- Diversion for irrigation of about 43,500 acres above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 4,150 ft³/s, June 2, 1983, gage height, 6.17 ft; minimum, 0.1 ft³/s, August 24, 1964.

Monthly and annual streamflow 1962-84

Magnitude and probability of annual low flow based on period of record 1963-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	cient of vari-	Percent of annual runoff	Period (con-		recurren	ce inter	³ /s, for val, in y obability	ears, a	nd
						 	tive days)	2 5 0%	5 20%	10 10%	20 5%	50 2%	100 1%
October	43 7	3.0	80	100	1.2	2.6							
November	198	9.3	73	59	0.80	2.4							
December	181	11	75	41	0.54	2.4	1	3.9	1.3	0.77	0.52		
January	147	17	72	35	0.49	2.4	3	4.0	1.6	1.1	0.88		
February	214	20	86	44	0.51	2.8	7	4.7	1.9	1.3	1.0		
March	472	27	151	103	0.68	4.9	14	6.1	2.5	1.7	1.3		
April	671	7 8	379	170	0.45	12.3	30	9.0	3.8	2.6	2.0		
May	1990	104	867	373	0.43	28.3	60	15	5.9	3.8	2.8		
June	2470	126	951	554	0.58	31.0	90	20	8.0	5.1	3.5		
July	870	9.2	216	243	1.1	7.0	120	29	12	7.8	5.3		
August	340	2.9	56	90	1.6	1.8	183	43	22	15	12		
September	288	3.0	62	90	1.5	2.0		·	····				
Annual	522	45	256	112	0.44	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

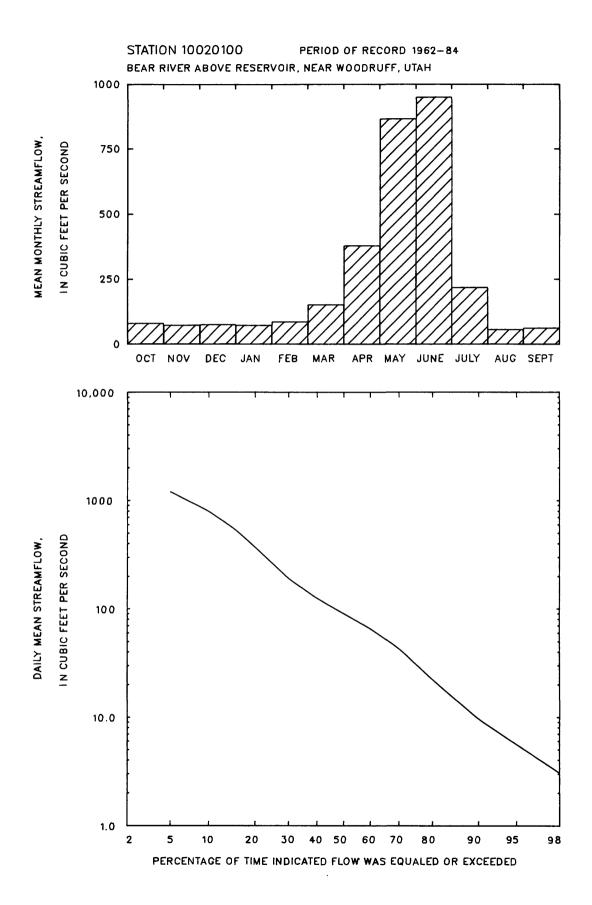
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1962-84

Period (con-			ce inter	3/s, for val, in bility,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	187 0	2520	2840	3160		
3	1780	2390	2690	2990		
7	1620	2170	2440	2710		
15	1410	1950	2210	2450		
30	1220	1700	1920	2100		
60	1010	1350	1470	1560		
90	807	1070	1160	1230		

Duration of daily mean flow for period of record 1962-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1960	120 0	793	545	369	190	124	90	66	43	22	9.6	5.5	3.0	2.2	1.7	1.1



10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UTAH

LOCATION.--Lat 41°30'20", long 111°00'50", in NW\2NW\2 sec.32, T.18 N., R.120 W., Uinta County, Wyo., on right bank 1,100 ft downstream from Woodruff Narrows Dam, 1.6 mi upstream from Salt Creek, 5.4 mi upstream from Wyoming-Utah State line, and 7.7 mi east of Woodruff.

DRAINAGE AREA. -- 784 mi².

PERIOD OF RECORD .-- October 1961 to current year.

GAGE .-- Water-stage recorder and concrete control. Datum of gage is 6,398.96 ft, from levels by Utah Water Resources Division from Bureau of Reclamation bench mark. Prior to September 26, 1962, at site 175 ft upstream at same datum.

REMARKS .-- Flow regulated by Woodruff Narrows Reservoir beginning January 1962. Diversions for irrigation of about 43,500 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,820 ft³/s, June 2, 1983, gage height, 8.26 ft; no flow July 4-5, 1962, August 30-31, September 1-2, 6-7, 1979, October 30, 1980.

Monthly and annual streamflow 1962-84

Magnitude and probability of annual low flow based on period of record 1963-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	• Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		Discharge recurrence on-exceed	é interv	al, in y	ears, a	nd
				(/-/			tive days)	2 50%	5 2 0%	10 10%	20 5%	50 2%	100 1%
October	425	5.0	63	115	1.8	2.1							
November	421	0.12	59	99	1.7	2.0							
December	184	4.3	48	47	0.97	1.6	1	2.2	0.06	0.00	0.00		
January	131	4.4	47	40	0.87	1.6	3	3.1	0.62	0.25	0.11		
February	171	4.7	52	49	0.95	1.7	7	3.8	0.86	0.36	0.17		
March	473	4.7	103	118	1.2	3.4	14	6.6	1.6	0.64	0.29		
April	663	0.34	303	228	0.75	10.2	30	11	2.7	1.1	0.44		
May	1830	28	822	349	0.42	27.6	60	15	6.4	4.1	2.9		
June	2440	396	1010	491	0.48	34.0	90	19	8.2	5.3	3.7		
July	913	20	317	222	0.70	10.7	120	22	9.3	6.0	4.2		
August	331	3.9	90	80	0.88	3.0	183	27	11	6.6	4.5		
September	278	3.7	60	69	1.2	2.0						771	
Annual	509	44	248	109	0.44	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

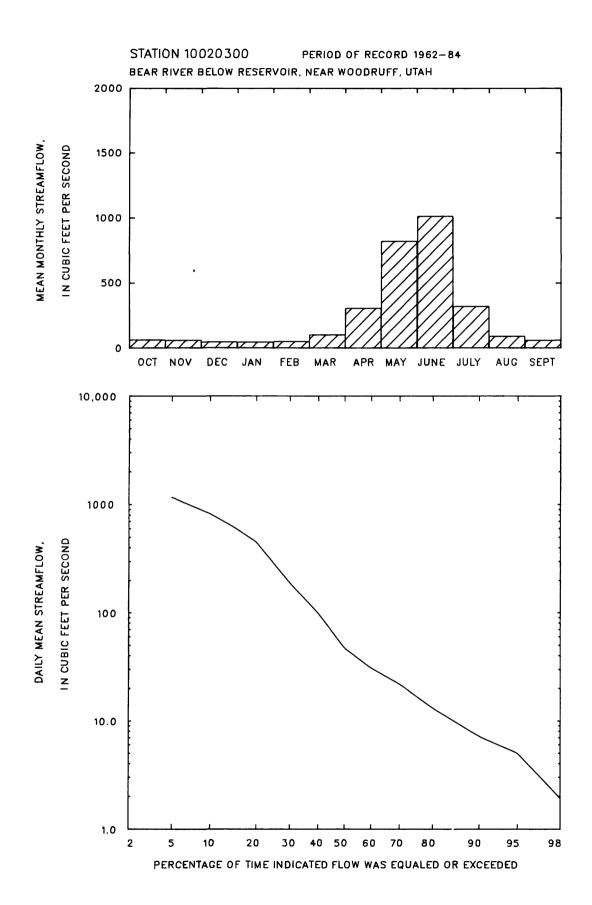
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1962-84

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1720	2390	2870	3520		
3	1650	2270	2720	3340		
7	1520	2070	2470	3020		
15	1310	1820	2190	2690		
30	1140	1610	1910	2270		
60	987	1310	1450	1570		
90	816	1060	1140	1210		

Duration of daily mean flow for period of record 1962-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1990	1150	819	601	448	188	98	47	31	22	13	7.1	4.9	1.9	0.43	0.20	0.07



10020500 BEAR RIVER NEAR WOODRUFF, UTAH

LOCATION.--Lat 41°31'25", long 111°01'00', in SW% sec.20, T.18 N., R.120 W., Uinta County, Wyo., on left bank 2.8 mi upstream from Wyoming-Utah State line and 7.6 mi east of Woodruff.

DRAINAGE AREA. -- 870 mi², approximately.

PERIOD OF RECORD. --October 1941 to September 1961. Monthly discharge only for some periods; published in WSP 1314. GAGE. --Water-stage recorder. Altitude of gage is 6,360 ft, from river-profile msp.

REMARKS.--Diversions for irrigation of about 45,000 acres above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 3,010 ft³/s April 28, 1952, gage height, 5.32 ft; maximum gage height, 5.98 ft March 21, 1951 (ice jam); no flow at times in each year 1942-49, 1954-61.

Monthly snd annual streamflow 1943, 1945, 1947, 1949-61

Magnitude and probability of	annual low flow based
on period of record 1944,	1946, 1948, 1950-61

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	121	0.15	23	33	1.4	1.0
November	82	3.9	39	28	0.71	1.7
December	127	8.5	57	31	0.54	2.4
January	98	27	57	21	0.38	2.5
February	103	37	64	18	0.28	2.8
March	395	24	137	98	0.72	5.9
April	987-	53	362	254	0.70	15.6
Mav	1730	222	695	373	0.54	29.9
June	1650	90	730	442	0.61	31.5
July	378	1.2	112	109	0.97	4.8
August	129	0.12	31	44	1.4	1.4
September	-	0.00	13	15	1.1	0.6
Annual	404	50	193	94	0.49	100

Period (con-	1	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent												
tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%								
1	0.00	0.00	0.00											
3	0.00	0.00	0.00											
7	0.00	0.00	0.00											
14	0.00	0.00	0.00											
30	0.00	0.00	0.00											
60	1.5	0.00	0.00											
90	6.1	1.0	0.39											
120	11	2.9	1.4											
183	27	12	7 4											

Magnitude and probability of instantaneous peak flow based on 20 years of record

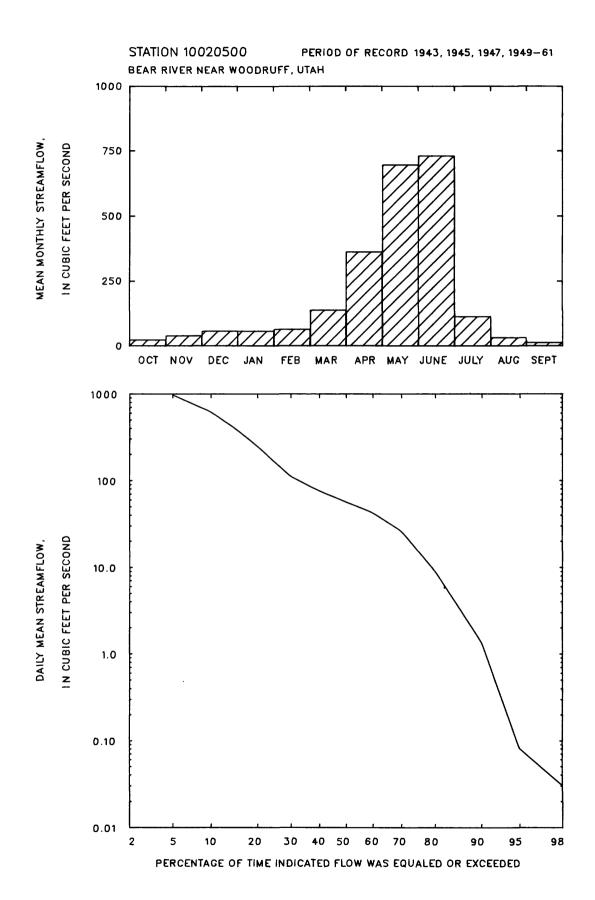
	e, in ft ³ ars, and				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
1620	2160	2480	2850	3100	3330

Magnitude and probability of annual high flow based on period of record 1943, 1945, 1947, 1949-61

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	and
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	1480	2060	2420			
3	1340	1930	2330			
7	1190	1750	2130			
15	1010	1560	1950			
30	833	1300	1630			
60	674	1060	1310			
90	555	868	1070			

Duration of daily mean flow for period of record 1943, 1945, 1947, 1949-61

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated 1	percent	age of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1820	965	614	384	247	110	75	56	42	26	9.0	1.3	0.08	0.03	0.02	0.01	0.00



10026500 BEAR RIVER NEAR RANDOLPH, UTAH

LOCATION.--Lat 41°48'02", long 111°04'20", in SE½NE½ sec.7, T.12 N., R.8 E., Rich County, Utah, on left bank 3.7 mi upstream from Twin Creek, 5.0 mi upstream from Utah-Wyoming State line, and 11 mi northeast of Randolph.

DRAINAGE AREA.--1,616 mi2.

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods; published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft, from river-profile map. Prior to August 17, 1971, 0.2 mi upstream at different datum.

REMARKS.--Diversion for irrigation of about 94,500 acres above station. Flow regulated by upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,630 ft³/s, June 4, 1983, gage height, 8.58 ft; minimum discharge, 1.6 ft³/s, November 12, 1961.

Monthly and annual streamflow 1945-84

Magnitude and probability of annual low flow based on period of record 1946-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	463	5.9	74	99	1.3	2.9
November	475	7.4	88	92	1.0	3.5
December	305	18	80	55	0.69	3.1
January	174	18	80	43	0.53	3.1
February	235	25	96	48	0.50	3.8
March	843	24	211	166	0.79	8.3
April	1080	19	398	303	0.76	15.6
May	1840	11	505	437	0.87	19.8
June	2460	27	660	530	0.80	25.9
July	800	6.5	224	214	0.96	8.8
August	409	3.5	83	86	1.0	3.3
September	378	5.4	53	73	1.4	2.1
Annual	586	23	213	132	0.62	100

Period (con-		Discharge recurrence on-exceed	é interv	al, in y	ears, an	d
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	18	8.0	5.4	3.8	2.6	
3	18	8.3	5.5	3.9	2.7	
7	19	8.7	5.8	4.1	2.8	
14	20	9.3	6.2	4.4	3.0	
30	24	11	6.8	4.8	3.2	
60	32	14	9.0	6.1	3.8	
90	40	19	12	8.1	5.1	
120	47	22	14	9.8	6.3	
183	55	28	19	14	9.8	

Magnitude and probability of instantaneous peak flow based on 41 years of record

		/s, for in exceedance			
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
1360	2200	2730	3330	3740	4110

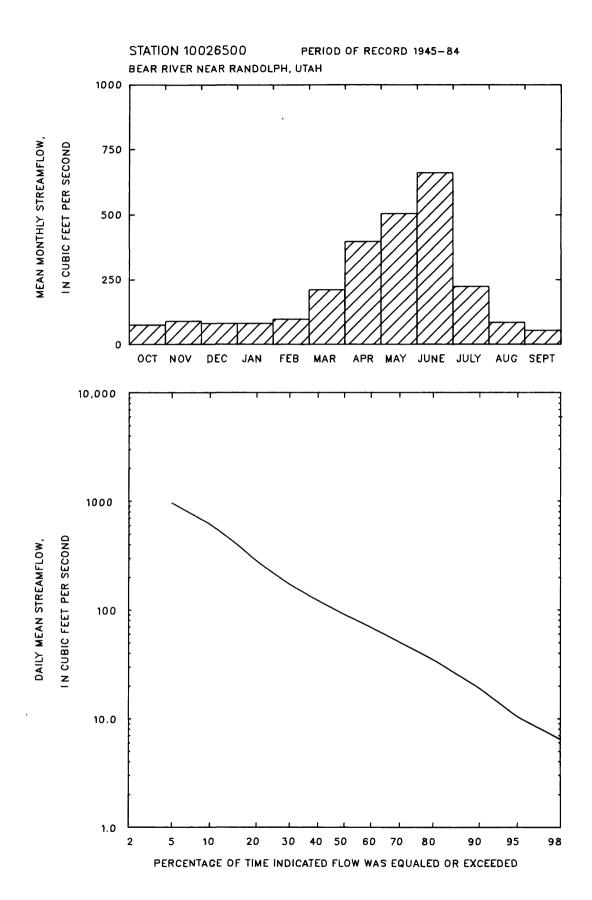
Weighted skew = -0.680

Magnitude and probability of annual high flow based on period of record 1945-84

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1330	2220	2690	3140	3400	
3	1280	2150	2610	3050	3300	
7	1170	1990	2410	2820	3040	
15	1000	1750	2140	2510	2710	
30	831	1450	1770	2050	2200	
60	636	1120	1380	1630	1770	
90	520	917	1140	1360	1480	

Duration of daily mean flow for period of record 1945-84

	Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1730	955	614	409	280	172	121	90	69	50	35	19	10	6.4	5.5	4.6	3.0



10027000 TWIN CREEK AT SAGE, WYO.

LOCATION.--Lat 41°48'36", long 110°58'12", in NE\SW\SE\ sec.7, T.21 N., R.119, W., Lincoln County, on right bank 0.5 mi downstream from Bulldog Hollow, 0.5 mi southwest of Sage, 0.8 mi southeast of junction of U. S. Highway 30 and State Highway 89, and 5.0 mi upstream from mouth.

DRAINAGE AREA. -- 246 mi².

PERIOD OF RECORD .-- April 1943 to September 1962, July 1976 to September 1981.

GAGE.--Water-stage recorder. Altitude of gage is 6,320 ft, from topographic map. Prior to October 1, 1945, non-recording gage at site 0.8 mi upstream at different datum. October 1, 1945, to September 30, 1962, water-stage recorder at site 0.2 mi upstream at different datum.

REMARKS. -- Diversions for irrigation of about 1,100 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 853 ft³/s April 23, 1980, gage height, 8.13 ft; minimum daily, 0.6 ft³/s March 18, 1953, result of freezeup.

Monthly and annual streamflow 1944-62, 1977-81

Magnitude and probability of annual low flow based on period of record 1944-62, 1978-81

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	14	3.3	7.4	2.9	0.39	3.3
November	17	2.7	7.6	2.9	0.38	3.4
December	21	3.0	7.0	3.7	0.52	3.1
January	12	3.3	6.1	2.1	0.35	2.7
February	33	3.5	8.6	5.9	0.69	3.9
March	127	5.4	33	33	0.98	14.9
April	254	11	68	64	0.94	30.6
May	149	5.6	39	37	0.97	17.3
June	77	4.0	23	20	0.86	10.5
July	28	2.9	8.9	6.5	0.73	4.0
August	23	2.7	7.6	5.3	0.69	3.4
September	15	2.4	6.4	3.6	0.55	2.9
Annual	47	6.1	19	11	0.57	100

Period (con- secu- tive days)	1	cecurren	cé inter	3/s, for val, in y obability	years, an	, and								
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%								
1	2.7	1.7	1.3	1.1										
3	2.9	1.9	1.5	1.3										
7	3.2	2.2	1.8	1.5										
14	3.6	2.5	2.1	1.8										
30	4.0	2.9	2.5	2.2										
60	4.6	3.4	3.0	2.7										
90	5.1	3.8	3.3	2.9										
120	5.5	4.2	3.6	3.2										
183	6.1	4.6	4.1	3.7										

Magnitude and probability of instantaneous peak flow based on 25 years of record

Discharge, in ft ³ /s, for indicated recurrence interval in years, and exceedance probability, in percent											
2	5	10	25	50	100						
50%	20%	10%	4%	2%	1%						
224	503	732	1060	1310	1580						

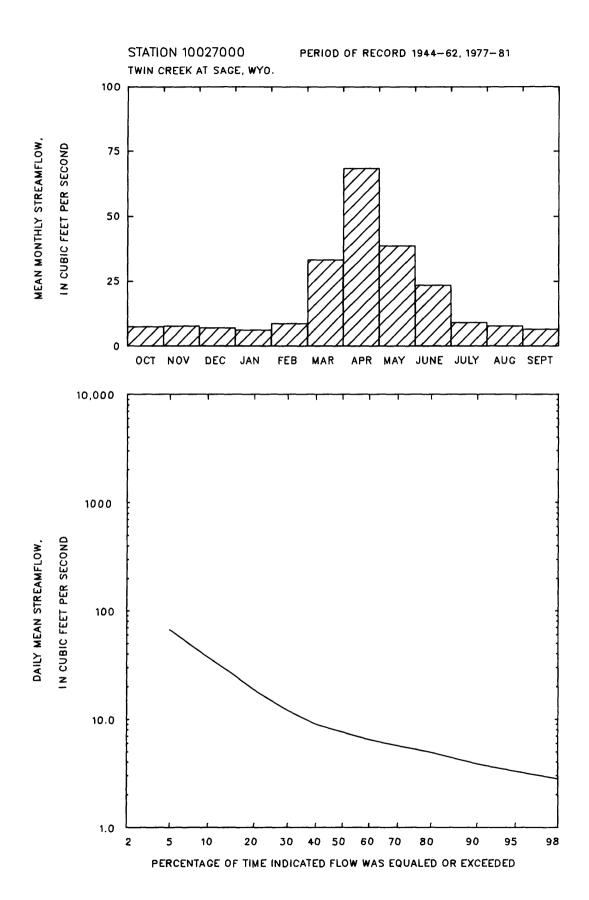
Weighted skew = -0.506

Magnitude and probability of annual high flow based on period of record 1944-62, 1977-81

Period (con-		recurre	nce inte	c ³ /s, for eval, in ability,	years, a	and
secu- tive	2	5	10	25	50	100
days)	50%	20%	10%	4%	2%	1%
1	194	406	572	798		
3	165	361	524	761		
7	129	285	420	624		
15	95	200	289	419		
30	70	139	196	279		
60	50	97	134	188		
90	41	76	105	145		

Duration of daily mean flow for period of record 1944-62, 1977-81

		Dis	charge,	, in ft ³	/s, whi	.ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
209	67	37	26	19	12	8.9	7.6	6.5	5.6	4.9	3.8	3.3	2.8	2.3	1.9	1.5



10032000 SMITHS FORK NEAR BORDER, WYO.

LOCATION.--Lat 42°17'16", long 110°52'14", in NW½ sec.33, T.27 N., R.118 W., Lincoln County, on left bank 4.5 mi upstream from Howland Creek, 6 mi downstream from Hobble Creek, and 12 mi northeast of Border.

DRAINAGE AREA. -- 165 mi².

PERIOD OF RECORD. -- May 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,680 ft, from topographic map. Prior to October 16, 1945, at site 0.8 mi downstream at different datum.

REMARKS.--One diversion for irrigation of about 200 acres above station.

EXTREMES FOR PERIOD OF RECORD. --Maximum discharge, 1,870 $\rm ft^3/s$, May 29, 1983, gage height, 5.45 $\rm ft$; minimum, 21 $\rm ft^3/s$, March 29, 1975, January 24, 1978.

Monthly and annual streamflow 1943-84

Magnitude and probability of annual low flow based on period of record 1944-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	1	Discharge recurrence on-excee	C
			 				tive days)	2 50%	5 20%	
October	134	51	91	16	0.17	3.8				_
November	110	51	79	11	0.13	3.3				
December	88	51	71	7.3	0.10	3.0	1	55	50	
Janua ry	85	52	66	6.8	0.10	2.7	3	56	51	
February	83	48	62	5.9	0.09	2.6	7	56	52	
March	84	51	61	7.4	0.12	2.6	14	57	53	
April	385	59	155	81	0.52	6.5	30	59	54	
May	956	99	568	208	0.37	23.7	60	61	56	
June	1290	96	662	261	0.39	27.6	90	63	58	
July	602	61	312	128	0.41	13.0	120	65	60	
August	242	55	159	42	0.27	6.6	183	72	66	
September	158	52	112	23	0.21	4.7		·		
Annual	312	71	200	52	0.26	100				

(con-	no	n-excee	dance pro	bability	, in per	rcent
tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100
1	55	50	47	45	41	39
3	56	51	49	46	43	42
7	56	52	50	47	45	43
14	57	53	50	48	45	43
30	59	54	52	50	48	47
60	61	56	54	52	50	49
90	63	58	56	54	52	51
120	65	60	57	55	53	52
183	72	66	62	60	57	55

Magnitude and probability of instantaneous peak flow based on 43 years of record

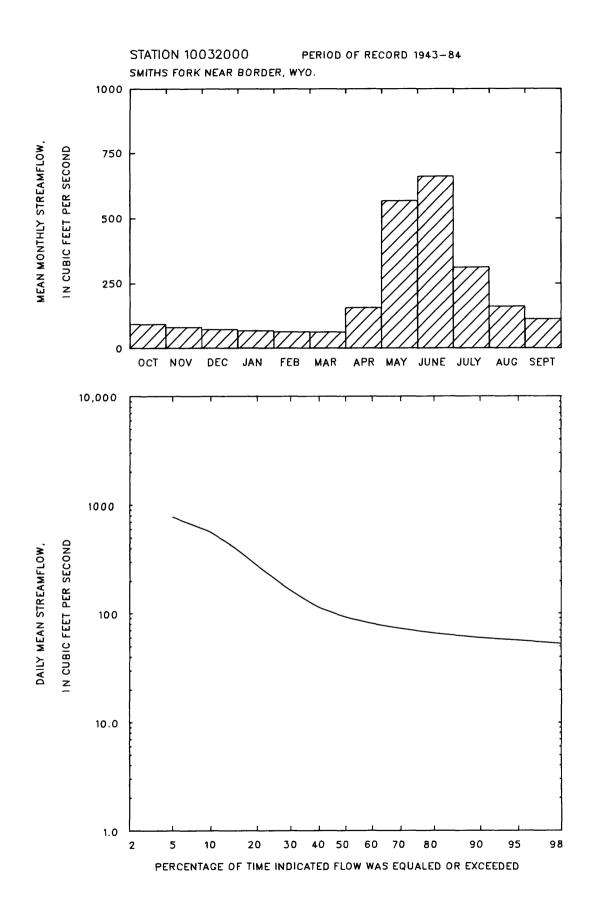
	e, in ft ³ , ars, and				
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
983	1300	1480	1680	1820	1950

Magnitude and probability of annual high flow based on period of record 1943-84

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1040	1270	1330	1360	1370	1370
3	1010	1240	1300	1330	1340	1350
7	958	1170	1230	1260	1270	1280
15	884	1100	1160	1200	1210	1220
30	802	999	1060	1090	1110	1110
60	671	853	914	956	973	983
90	552	699	752	788	804	813

Duration of daily mean flow for period of record 1943-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1120	772	562	394	275	162	112	91	79	72	65	59	56	52	5 0	49	44



10035000 SMITHS FORK AT COKEVILLE, WYO.

LOCATION.--Lat 42°06', long 110°57', in NW% sec.4, T., R.119 W., Lincoln County, on right bank 1 mi northeast of Cokeville and 2 mi upstream from mouth.

DRAINAGE AREA. -- 275 mi2.

PERIOD OF RECORD. -- April 1942 to September 1952.

GAGE.--Water-stage recorder. Altitude of gage is 6,250 ft, from topographic map. Prior to August 11, 1949, at site 85 ft downstream at different datum.

REMARKS. -- Diversions above station for irrigation of about 4,000 acres above and about 5,000 acres below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,320 ft³/s May 4, 1952; maximum gage height, 5.77 ft May 29, 1951; minimum discharge, 25 ft³/s August 22, 1949.

Monthly and annual streamflow 1943-52

Magnitude and probability of annual low flow based on period of record 1944-52

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-	:	Discharge recurrence on-exceed	e inter	val, in y	years, a	nd
	(10 /0)	(10 / 0)	(10 / 5)				tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	122	56	94	21	0.22	3.9			·····				
November	108	71	95	11	0.11	4.0							
December	101	68	89	10	0.11	3.7	1	53	37	30			
January	94	64	81	10	0.12	3.4	3	54	37	30			
February	98	61	79	12	0.15	3.3	7	55	39	32			
March	140	63	86	22	0.26	3.6	14	58	42	35			
April	503	95	286	129	0.45	11.9	30	63	47	40			
May	933	339	669	209	0.31	27.9	60	70	55	47			
June	931	37 3	546	160	0.29	22.8	90	76	63	57			
July	384	123	201	84	0.42	8.4	120	80	70	65			
August	122	41	83	33	0.39	3.4	183	86	76	71			
September	123	50	89	29	0.32	3.7							
Annual	263	140	200	42	0.21	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

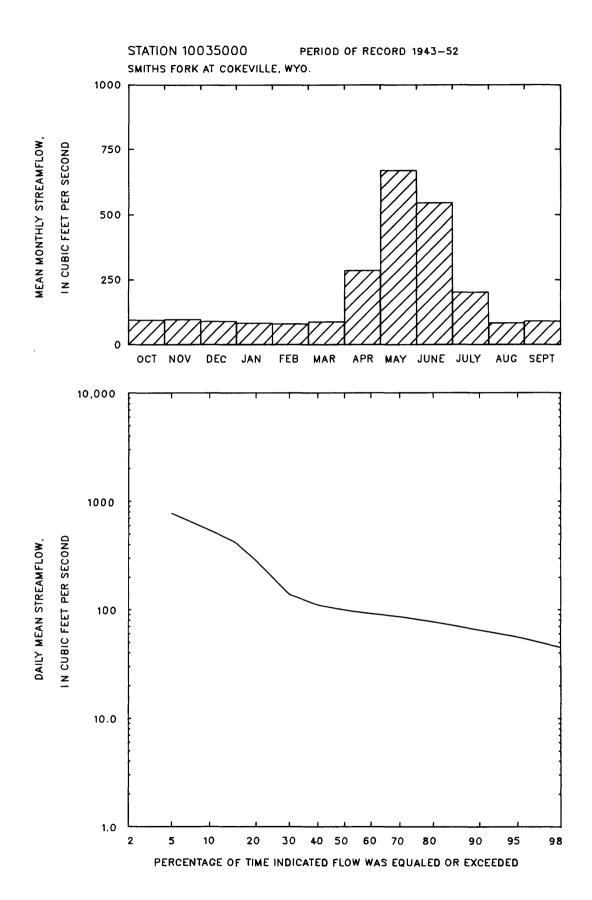
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1943-52

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	and
secu- tive days)	2 50%	5 2 0%	10 10%	25 4%	50 2%	100 1%
1	991	1220	1330			
3	970	1200	1310			
7	932	1150	1270			
15	871	1080	1190			
30	768	955	1050			
60	638	783	862			
90	520	643	710			

Duration of daily mean flow for period of record 1943-52

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
1080	770	538	416	283	138	109	98	91	85	77	64	5 5	44	37	33	29



10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WYO.

LOCATION. -- Lat 42°07'36", long 110°58'21", in SE\nE\square sec. 28, T.25 N., R.119 W., Lincoln County, on left bank 1.1 mi upstream from Wyman Dam, 2.8 mi northwest of Cokeville, and 3.8 mi downstream from Smiths Fork.

DRAINAGE AREA. -- 2,447 mi2.

PERIOD OF RECORD. -- April 1954 to current year.

GAGE. -- Water-stage recorder. Altitude of gage is 6,140 ft, from river-profile map.

REMARKS .-- Natural flow of stream affected by diversion for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 5,620 ft3/s, June 7, 1983, gage height, 8.75 ft; minimum, 31 ft3/s, October 4, 5, 6, 1977.

Monthly and annual streamflow 1955-58, 1960-84

Magnitude and probability of annual low flow based on period of record 1956-59, 1961-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	755	56	221	159	0.72	3.9
November	692	83	229	134	0.58	4.0
December	536	97	203	91	0.45	3.6
January	344	95	189	68	0.36	3.3
February	406	111	213	77	0.36	3.7
March	1150	122	372	233	0.63	6.5
April	1870	69	737	520	0.71	12.9
May	279 0	115	1100	667	0.60	19.3
June	3710	97	1370	891	0.65	23.9
July	1560	71	627	422	0.67	11.0
August	707	80	249	156	0.63	4.4
September	658	56	205	136	0.66	3.6
An n ua 1	1050	112	477	231	0.48	100

Period (con- secu-	1	recurren	e, in ft ³ ce interv dance pro	al, in y	ears, a	ıd
tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	122	80	63	51	40	
3	125	82	65	53	41	
7	129	86	69	57	45	
14	133	90	72	60	48	
30	139	96	78	66	54	
60	149	106	88	76	64	
90	159	114	96	83	71	
120	166	118	100	88	76	
183	174	126	108	97	86	

Magnitude and probability of instantaneous peak flow

based on --- years of record

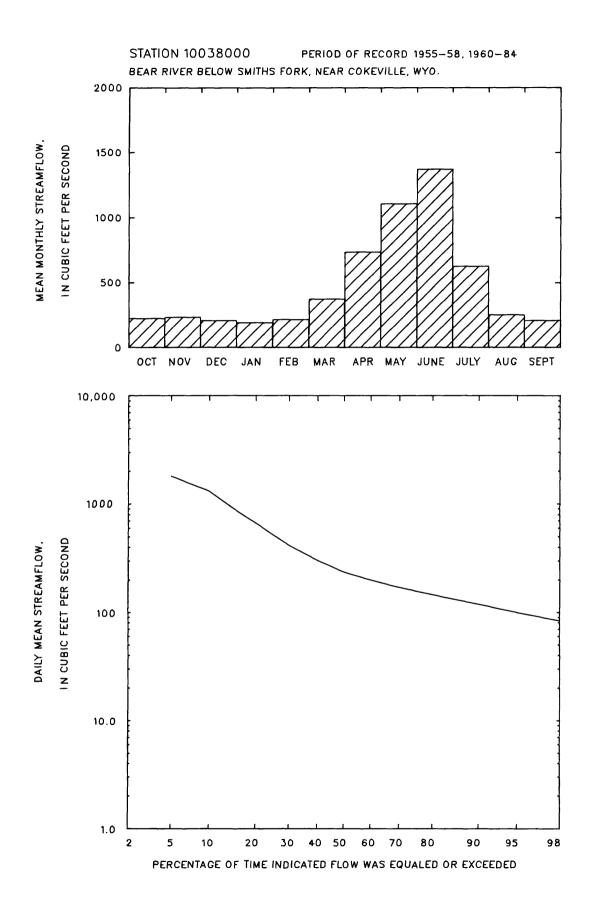
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1955-58, 1960-84

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2230	3390	3880	4260	4430	
3	2160	3280	3740	4110	4270	
7	2060	3130	3590	3950	4120	
15	1870	2870	3310	3670	3840	
30	1620	2510	2920	3280	3460	
60	1330	2070	2440	2770	2940	
90	1110	1730	2050	2340	2500	

Duration of daily mean flow for period of record 1955-58, 1960-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2750	1780	1300	880	665	414	301	234	198	170	146	118	99	82	70	57	41



10039500 BEAR RIVER AT BORDER, WYO.

LOCATION.--Lat 42°12'40", long 111°03'11", in NE½NE½NE½ sec.15, T.14 S., R.46 E., Bear Lake County, Idaho, on left bank 0.2 mi west of Idaho-Wyoming State line, 0.5 mi west of Border, and 2.1 mi upstream from Thomas Fork.

DRAINAGE AREA. -- 2,486 mi2.

PERIOD OF RECORD. -- October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft.

REMARKS.--Natural flow of stream affected by regulation by upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft³/s, June 7, 1983, gage height, 9.69 ft; minimum, 24 ft³/s, April 29, 30, 1977.

Monthly and annual streamflow 1938-84

Magnitude and probability of annual low flow based on period of record 1939-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-	:	recurren	e, in ft ³ ce interv dance pro	al, in y	ears, ar	nd
		(10 / 5)	(10 /3)	(10 / 5)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	751	51	206	128	0.62	3.8							
November	693	81	222	113	0.51	4.1							
December	56 3	106	198	8 3	0.42	3.7	1	114	71	5 3	41	30	24
January	360	94	184	66	0.36	3.4	3	117	72	54	42	30	24
February	441	111	209	76	0.36	3.9	7	120	75	57	44	32	26
March	1200	137	386	219	0.57	7.2	14	123	78	60	48	36	30
April	1900	71 .	786	501	0.64	14.6	30	131	86	68	55	43	3 6
May	3160	74	1070	699	0.65	19.9	60	144	96	77	63	50	43
June	3830	62	1190	822	0.69	22.2	90	156	107	86	71	57	49
July	1670	54	520	382	0.73	9.7	120	165	115	94	79	65	57
August	752	42	226	142	0.63	4.2	183	172	123	104	90	78	70
September	671	39	180	118	0.66	3.3							
Annua1	1070	103	449	216	0.48	100							

Magnitude and probability of instantaneous peak flow based on 45 years of record

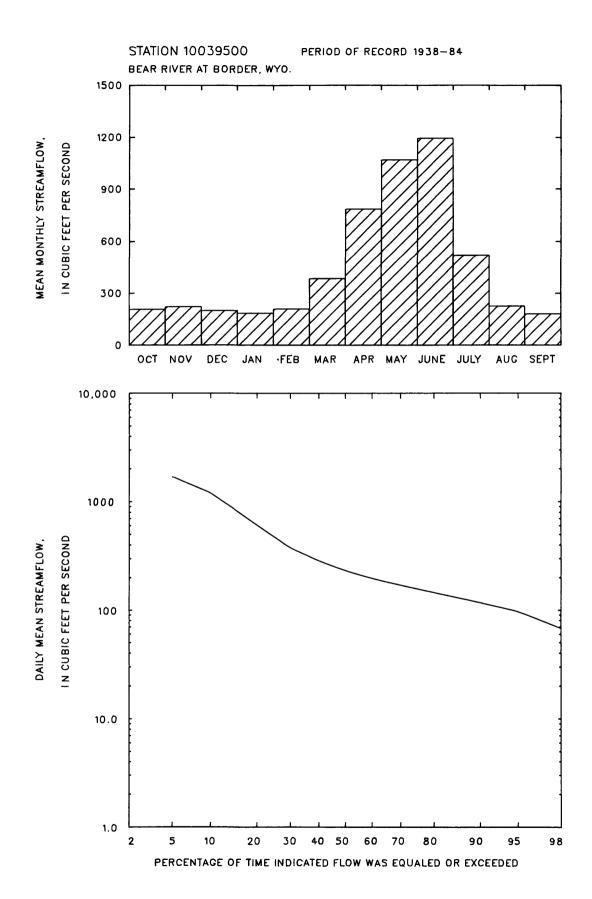
	e, in ft ³ , ars, and				e interval percent
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
2010	2970	3580	4310	4820	4310

Magnitude and probability of annual high flow based on period of record 1938-84

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	nd
tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2030	3090	3570	3980	4180	4320
3	1980	3010	3460	3840	4020	4140
7	1890	2890	3340	3710	3890	4020
15	1700	2660	3120	3520	3720	3870
30	1460	2320	2760	3170	3390	3560
60	1190	1920	2310	2700	2930	3110
90	1020	1620	1950	2280	2480	2640

Duration of daily mean flow for period of record 1938-84

		Dis	charge,	in ft ³	/s, whi	.ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2690	1680	1190	827	607	374	283	229	195	169	145	117	96	67	55	41	31



10040000 THOMAS FORK NEAR GENEVA, IDAHO

LOCATION.--Lat 42°23'30",long 110°59'00", NE¼ sec.28, T.28 N., R.119 W., Lincoln County, on right bank 0.8 mi upstream from Salt Creek, 3.7 mi east of Wyoming-Idaho State line, and 5.4 mi northeast of Geneva Post Office.

DRAINAGE AREA. -- 45.3 mi².

PERIOD OF RECORD. --October 1939 to September 1951. Monthly discharge only for October 1939; published in WSP 1314. GAGE. --Water-stage recorder. Altitude of gage is 6,400 ft, from topographic map.

REMARKS. -- No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 418 ft³/s May 18, 1950, gage height, 4.25 ft, from rating curve extended above 240 ft³/s; minimum daily, 1.3 ft³/s November 13, 1940.

Monthly and annual streamflow 1941-51

Magnitude and probability of annual low flow based on period of record 1941-51

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		recurren	ce inter	3/s, for val, in obability	years, a	nd
			(20 /5)	(20 , 2)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	6.1	2.2	4.3	1.3	0.31	2.1							
November	7.3	1.9	4.1	1.5	0.36	2.0							
December	5.1	1.7	3.5	1.2	0.34	1.7	1	2.3	1.8	1.5	1.3		
January	6.6	1.6	3.4	1.5	0.44	1.6	3	2.4	1.8	1.6	1.4		
February	4.6	1.6	3.0	1.0	0.33	1.5	7	2.6	2.0	1.7	1.5		
March	21	2.1	5.2	5.4	1.0	2.5	14	2.6	2.0	1.7	1.5		
April	110	8.8	49	32	0.66	23.8	30	2.7	2.1	1.8	1.5		
May	156	23	74	43	0.58	35.8	60	2.9	2.1	1.8	1.6		
June	70	15	35	16	0.45	17.2	90	3.0	2.2	1.9	1.6		
July	23	5.5	13	5.1	0.39	6.4	120	3.1	2.3	1.9	1.7		
August	9.6	2.7	6.6	2.3	0.34	3.2	183	3.5	2.5	2.1	1.8		
September	6.7	1.9	4.6	1.5	0.32	2.2						Re	
Annual	30	8.2	17	7.4	0.43	100							

Magnitude and probability of instantaneous peak flow based on 12 years of record

2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

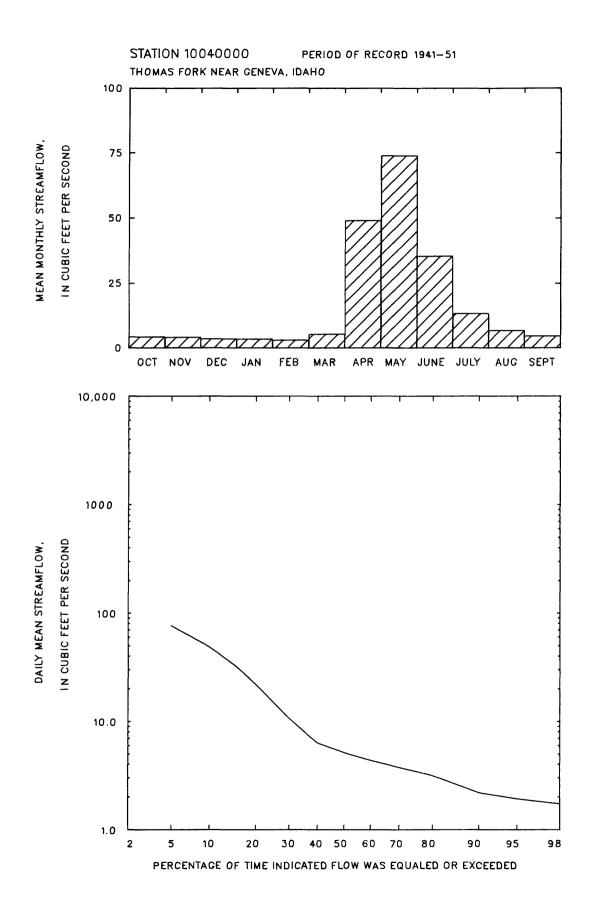
Weighted skew = -0.250

Magnitude and probability of annual high flow based on period of record 1941-51

Period (con-		recurre	ncé inte	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100
1	127	215	284			
3	118	201	267			
7	108	182	239			
15 30	94 79	162 132	214 170			
60	79 61	97	122			
90	49	75	92			

Duration of daily mean flow for period of record 1941-51

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded 1	or indi	cated p	ercenta	ge of t	ime		
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
162	76	49	33	22	11	6.3	5.1	4.3	3.7	3.1	2.2	1.9	1.7	1.6	1.5	1.5



10040500 SALT CREEK NEAR GENEVA, IDAHO

LOCATION.--Lat 42°24'00", long 110°59'30", in NW% sec.21, T.28 N., R.119 W., Lincoln County, Wyo., on left bank 800 ft upstream from bridge on U. S. Highway 89, 1,000 ft upstream from mouth, 3.0 mi east of Wyoming-Idaho State line, and 4.75 mi northeast of Geneva Post Office.

DRAINAGE AREA. -- 37.6 mi².

PERIOD OF RECORD. -- October 1939 to September 1951. Monthly discharge only for October 1939; published in WSP 1314. GAGE. -- Water-stage recorder. Altitude of gage is 6,350 ft, from topographic map.

REMARKS. -- No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 382 ft³/s May 18, 1950, gage height, 5.02 ft; minimum, 0.5 ft³/s August 18, 1940.

Monthly and annual streamflow 1941-51

Magnitude and probability of annual low flow based on period of record 1941-51

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	6.9	2.6	E 1	1.5	0.29	2 1
November	6.8	2.0	5.1 4.7	1.4	0.29	2.1 1.9
December	5.3	1.8	3.9	1.1	0.31	1.6
January	5.6	1.8	3.8	1.2	0.29	1.6
February	4.7	1.8	3.5	0.88	0.25	1.5
March	9.0	2.7	4.4	1.8	0.42	1.8
April	125	9.4	49	40	0.82	20.4
May	175	39	95	41	0.43	39.3
June	83	23	43	19	0.44	18.0
July	26	9.4	16	5.4	0.34	6.5
August	11	4.1	7.5	2.4	0.33	3.1
September	7.6	3.2	5.4	1.5	0.28	2.2
Annual	32	11	20	6.7	0.33	100

Period (con-	1	recurren	cé inter	3/s, for 7al, in y 5bability	ears, a	nd
secu- tive days)	2 50%	5 2 0%	10 10%	20 5%	50 2%	100 1%
1	2.9	1.9	1.4	0.99		
3	3.1	2.0	1.4	1.0		
7	3.2	2.1	1.5	1.0		
14	3.3	2.2	1.6	1.1		
30	3.4	2.3	1.8	1.3		
60	3.6	2.6	2.0	1.6		
90	3.6	2.7	2.3	1.9		
120	3.7	2.8	2.3	2.0		
183	4.2	3.1	2.5	2.1		

Magnitude and probability of instantaneous peak flow based on 12 years of record

	ge, in ft ³ ars, and				e interva percent
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
165	294	386	506	595	684

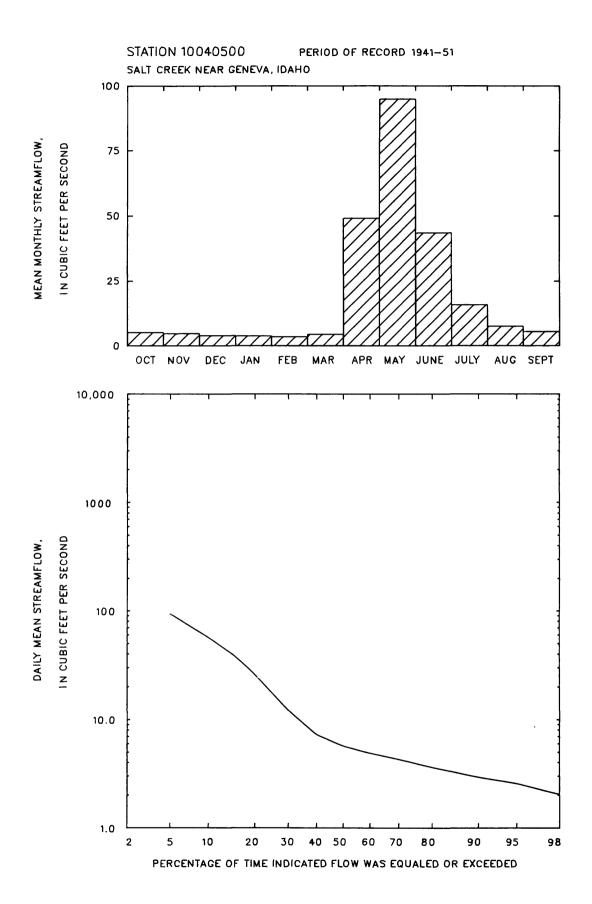
Weighted skew = -0.440

Magnitude and probability of annual high flow based on period of record 1941-51

Period (con-		recurre	ice inte	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	161	259	325			
3	156	246	305			
7	145	229	284			
15	129	201	250			
30	107	161	194			
60	81	112	130	~		
90	62	85	99			

Duration of daily mean flow for period of record 1941-51

	Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
203	93	57	39	26	12	7.2	5.6	4.8	4.2	3.6	2.9	2.5	2.0	1.9	1.8	1.6



10041000 THOMAS FORK NEAR WYOMING-IDAHO STATE LINE

LOCATION.--Lat 42°24'10", long 111°01'30", in SE½NW½ sec.19, T.28 N., R.119 W., Lincoln County, Wyo., on right bank 1.3 mi upstream from State line, 1.5 mi downstream from Giraffe Creek, and 3.5 mi northeast of Geneva, Idaho.

DRAINAGE AREA.--113 mi².

PERIOD OF RECORD. -- October 1949 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,280 ft, from topographic map. Prior to August 23, 1957, at site 0.2 mi upstream at different datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,280 ft³/s, May 26, 1983, gage height, 4.30 ft; minimum, 2.6 ft³/s, March 2, 1956, result of freezeup.

Monthly and annual streamflow 1950-84

Magnitude and probability of annual low flow based on period of record 1951-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		recurren	ge, in ft ³ ce interv	al, in y	ears, ar	ıd
							tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	32	7.9	18	5.4	0.30	2.7							
November	28	8.6	17	4.3	0.26	2.5							
December	29	9.7	16	4.7	0.29	2.4	1	11	8.3	6.9	5.9	4.9	
January	21	9.4	15	3.3	0.22	2.2	3	12	8.7	7.4	6.3	5.2	
February	27	9.0	15	3.6	0.24	2.2	7	12	9.3	7.9	6.7	5.5	
March	40	9.1	18	5.4	0.31	2.6	14	13	9.7	8.3	7.2	6.0	
April	301	18	96	67	0.70	14.0	30	13	10	8.8	7.7	6.4	
May	623	15	280	169	0.60	40.8	60	14	11	9.3	8.1	6.9	
June	275	9.6	118	69	0.58	17.2	90	14	11	9.7	8.5	7.3	
July	85	7.2	47	22	0.48	6.8	120	15	12	10	8.9	7.6	
August	48	7.0	26	11	0.42	3.8	183	16	12	11	9.5	8.1	
September	36	6.9	20	7.9	0.40	2.9	-						
Annual	105	13	57	26	0.46	100							

Magnitude and probability of instantaneous peak flow based on 35 years of record

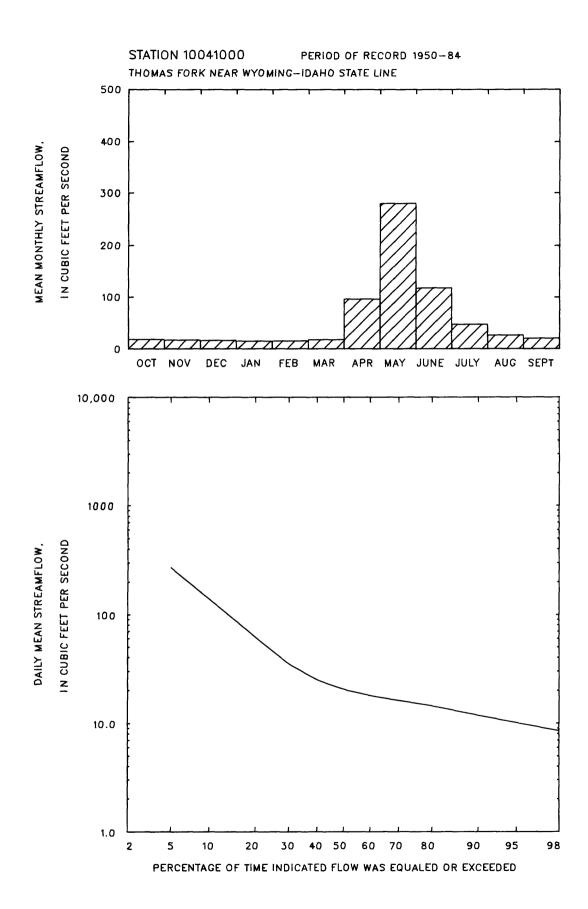
		/s, for in			
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
468	871	1150	1490	1730	1950

Magnitude and probability of annual high flow based on period of record 1950-84

Period (con-		recurre	ice inter	c ³ /s, for rval, in ability,	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	418	767	979	1210	1360	
3	395	726	924	1140	1260	
7	369	676	853	1040	1140	
15	331	596	745	893	978	
30	278	489	603	713	775	
60	207	345	416	483	520	
90	161	261	313	364	392	

Duration of daily mean flow for period of record 1950-84

	Discharge, in ft^3/s , which was equaled or exceeded for indicated percentage of time															
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
549	270	140	89	62	35	25	20	18	16	14	12	10	8.5	7.3	6.5	5.8



13011000 SNAKE RIVER NEAR MORAN, WYO.

LOCATION.--Lat 43°51'31", long 110°35'09", in SW4SE4 sec.18, T.45 N., R.114 W., Teton County, Grand Teton National Park, on left bank 1,000 ft downstream from Jackson Lake Dam, 4.1 mi west of Moran, and at mile 988.7.

DRAINAGE AREA. -- 807 mi2.

PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods; published in WSP 1317.

Published as "South Fork Snake River at Moran" prior to October 1910 and as "Snake River at Moran" October 1910 to September 1968.

GAGE.--Water-stage recorder. Datum of gage is 6,727.84 ft, from levels by U.S. Bureau of Reclamation. Prior to June 13 1917, non-recording gage, and June 14, 1917, to May 20, 1940, water-stage recorder, at site 1.5 mi downstream at different datums.

REMARKS .-- Flow regulated by Jackson Lake.

COOPERATION .-- Gage readings for current reporting purposes furnished by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft³/s, June 12, 1918, gage height, 10.41 ft, site and datum then in use; maximum gage height, 10.74 ft, June 25, 1981; no flow September 28 to October 4, 1909.

EXTREMES OUTSIDE PERIOD OF RECORD. -- Flood during early June 1894 was considerably higher than that of June 12, 1918.

Monthly and annual streamflow 1904-84

Magnitude and probability of annual low flow based on period of record 1905-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	e, in ft ³ ce interv	al, in y	ears, an	ıd
			(10 / 0)				tive days)	2 5 0%	5 20%	10 10%	20 5%	50 2%	100 1%
October	1610	5.1	312	357	1.1	1.8							
November	3010	3.0	273	419	1.5	1.6							
December	4280	2.0	313	535	1.7	1.8	1	26	6.5	2.9	1.3	0.00	0.00
January	1360.	2.0	279	293	1.0	1.6	3	27	7.0	3.3	1.6	0.00	0.00
February	2490	2.0	348	485	1.4	2.0	7	28	7.5	3.6	1.8	0.00	0.00
March	3050	2.0	433	596	1.4	2.5	14	34	9.1	4.7	2.8	1.6	1.1
April	3830	2.5	681	910	1.3	3.9	30	39	11	5.5	3.3	1.8	1.3
May	5660	6.5	1380	1450	1.0	8.0	60	50	14	6.9	4.0	2.2	1.5
June	8600	52	3420	1880	0.55	19.8	90	75	18	8.5	4.9	2.5	1.6
July	8180	1350	4250	1420	0.33	24.6	120	94	21	11.0	6.4	3.1	1.8
August	7370	987	3680	1470	0.40	21.3	183	154	38	17	8.6	3.7	2.1
September	5270	146	1930	1 0 50	0.54	11.2							
Annual	2150	856	1450	306	0.21	100							

Magnitude and probability of instantaneous peak flow based on 78 years of record

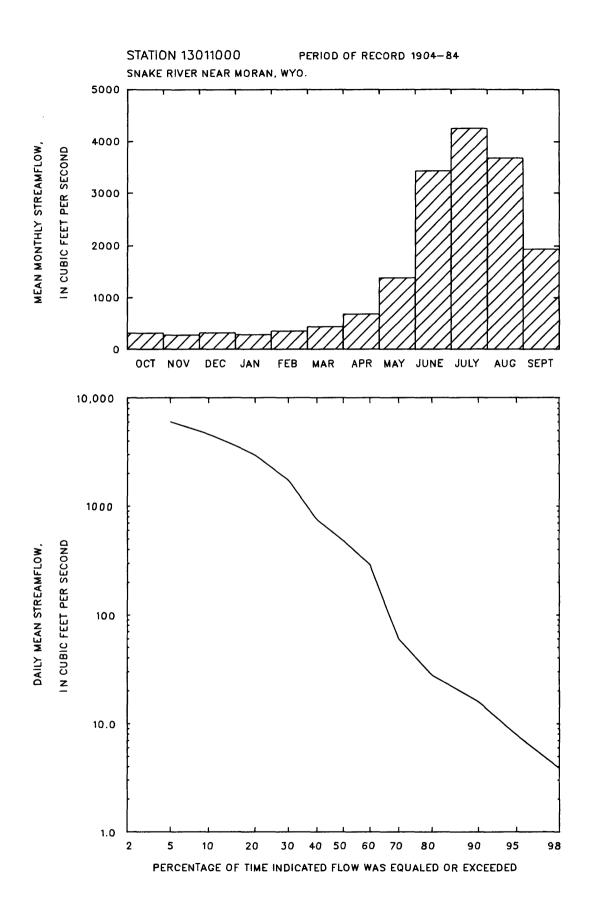
		/s, for i			e interval percent
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
7640	9800	11200	12800	14000	15200

Magnitude and probability of annual high flow based on period of record 1904-84

Period (con-		recurre	ge, in fi nce inter nce proba	rval, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	7220	9320	10700	12400	13600	149 0 0
3	7040	9100	10400	12000	13200	14400
7	6690	8610	9790	11200	12200	13200
15	6220	7910	8920	10100	10900	11700
30	5520	695 0	7790	8770	9440	10100
60	4660	5680	6280	6950	7420	7850
90	4100	4940	5430	5990	6380	6740

Duration of daily mean flow for period of record 1904-84

Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
8580	5970	4590	3630	2950	1730	747	482	289	60	28	16	7.8	3.8	3.2	2.0	1.6



13011500 PACIFIC CREEK AT MORAN, WYO.

LOCATION.-- Lat 43°51'04", long 110°30'59", in SW\nW\nk sec. 23, T.45 N., R.114 W., Teton County, Grand Teton National Park, on left bank 40 ft upstream from bridge on U.S. Highway 287, at Moran, and at mile 0.5.

DRAINAGE AREA. -- 169 mi².

PERIOD OF RECORD.--July to November 1906 (gage heights only), July 1917 to September 1918 (no winter records),
September 1944 to September 1975, July 1978 to current year. Published as "near Moran" prior to October 1968.

GAGE.--Water-stage recorder. Altitude of gage is 6,720 ft, from topographic map. July 31 to November 11, 1906, non-recording gage at site 0.4 mi downstream at different datum. July 20, 1917, to September 30, 1918, non-recording gage at site 0.1 mi downstream at different datum. September 23, 1944, to November 13, 1959, at site 100 ft upstream at same datum. November 14, 1959, to September 24, 1975, at site 35 ft downstream at same datum.

REMARKS. -- No diversion or regulation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,350 ft³/s, May 29, 1983, gage height, 6.33 ft; minimum daily, 19 ft³/s, December 31, 1979.

Monthly and annual streamflow 1945-75, 1979-84

Magnitude and probability of annual low flow based on period of record 1946-75, 1980-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	142	42	68	21	0.31	2.1
November	105	33	56	17	0.30	1.7
December	94	30	50	14	0.28	1.5
January	71	25	45	11	0.25	1.4
February	66	27	45	8.9	0.20	1.4
March	95	35	51	11	0.23	1.6
April	418	53	126	74	0.59	3.9
May	1610	345	923	285	0.31	28.6
June	2380	469	1310	448	0.34	40.7
July	1530	91	377	261	0.69	11.7
August	191	51	102	33	0.33	3.2
September	127	41	73	18	0.24	2.3
Annua1	403	169	269	62	0.23	100

Period (con-	1	recurren	e, in ft ³ ce interv dance pro	al, in y	ears, an	ıd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	34	27	24	22	20	
3	35	2 9	26	23	21	
7	37	30	27	25	22	
14	38	32	28	26	24	
30	40	33	3 0	28	25	
60	42	35	32	29	27	
90	44	37	34	31	29	
120	46	3 9	35	33	30	
183	51	43	40	38	35	

Magnitude and probability of instantaneous peak flow based on 39 years of record

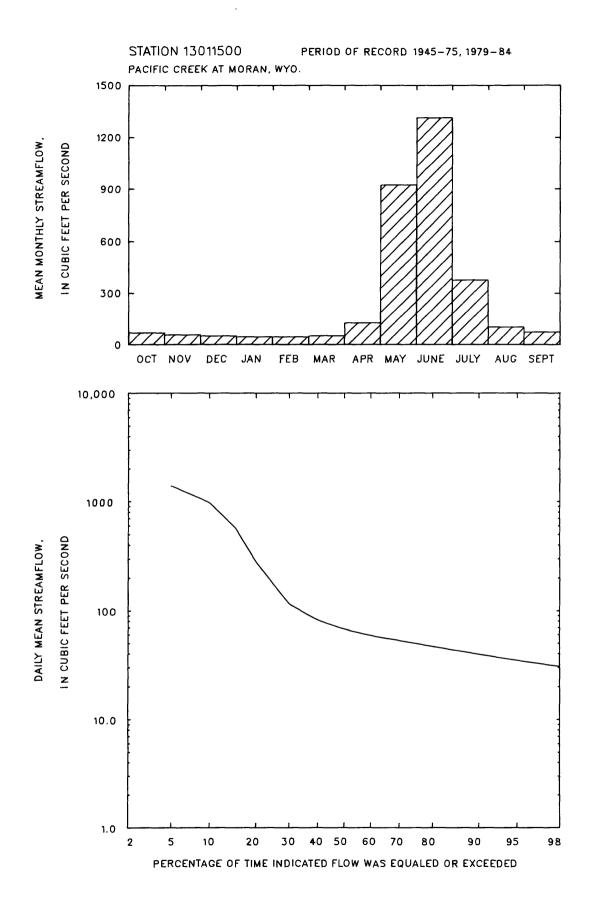
Discharge, in ft3/s, for indicated recurrence interval in years, and exceedance probability, in percent 10 50 100 25 50% 20% 4% 10% 2% 1% 2490 3170 3600 4140 4540 4920 Weighted skew = 0.063

Magnitude and probability of annual high flow based on period of record 1945-75, 1979-84

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	nd
secu- tive days)	2 5 0%	5 20%	10 10%	25 4%	50 2%	100 1%
1	2190	2730	3050	3440	3710	
3	2060	2560	2870	3240	3500	
7	1900	2370	2670	3040	3320	
15	1710	2160	2450	2820	3090	
30	1480	1840	2070	2370	2590	
60	1150	1420	1580	1770	1910	
90	867	1080	1210	1370	1480	

Duration of daily mean flow for period of record 1945-75, 1979-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2230	1390	978	572	2 8 1	114	81	67	58	52	46	39	34	30	28	26	23



13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WYO.

LOCATION.--Lat 43°50'14", long 110°26'21", in SE\NE\s sec.29, T.45 N., R.113 W., Teton County, Grand Teton National Park, on right bank underneath bridge on U.S. Highway 26, 287, about 2 mi upstream from Lava Creek, 3.5 mi east of Moran, and 4.0 mi upstream from mouth.

DRAINAGE AREA. -- 323 mi².

PERIOD OF RECORD.--September 1965 to current year. July to November 1906, July 1917 to September 1918, and September 1944 to September 1960 at sites about 3 mi downstream.

GAGE. .- Water-stage recorder. Datum of gage is 6,772.78 ft, from Federal Highway Administration bench mark.

 $\label{lem:remarks.--No regulation} \textbf{REMARKS.--No regulation or significant diversions above station.}$

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,540 ft³/s, June 9, 1981, gage height, 8.61 ft; minimum daily, 77 ft³/s, February 5, 1982.

Monthly and annual streamflow 1966-84

Magnitude and probability of annual low flow based on period of record 1967-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-	:	recurren	e, in ft ce inter dance pro	val, in y	years, a	nd
	(10 / 0)	(10 /0)	(10 /5)	(10 / 5)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	304	137	226	51	0.23	3.3							
November	229	122	174	28	0.16	2.6							
December	170	100	143	17	0.12	2.1	1	96	86	81	77		
January	143	93	123	14	0.12	1.8	3	99	90	86	83		
February	191	93	118	22	0.19	1.7	7	103	94	89	85		
March	175	101	125	20	0.16	1.8	14	106	97	91	87		
April	301	124	194	50	0.26	2.9	30	110	100	95	90		
May	1770	397	974	339	0.35	14.4	60	114	104	98	94		
June	4110	1280	2410	699	0.29	35.6	90	118	107	103	99		
July	3060	230	1540	794	0.51	22.8	120	125	114	110	106		
August	946	163	462	194	0.42	6.8	183	151	134	126	119		
September	428	141	280	83	0.29	4.1							
Annual	751	286	566	122	0.22	100							

Magnitude and probability of instantaneous peak flow based on 19 years of record

		s, for in			
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
4260	5080	5600	6210	6660	7090

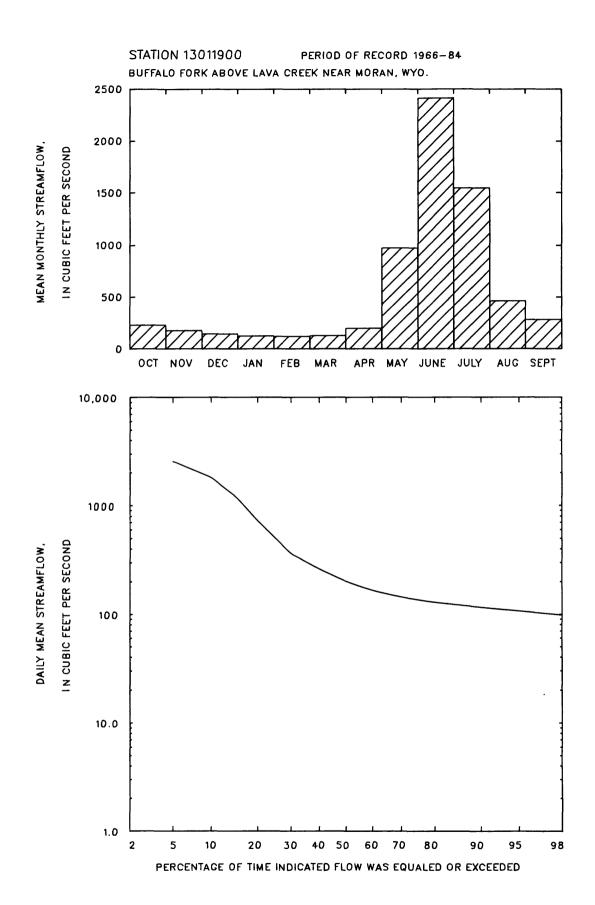
Weighted skew = 0.176

Magnitude and probability of annual high flow based on period of record 1966-84

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3870	4780	5370	6110		
3	3680	4570	5140	5860		
7	3390	4270	4870	5640		
15	3000	3860	4430	5160		
30	2670	3330	3700	4090		
60	2220	2670	2860	3020		
90	1740	2090	2240	2360		

Duration of daily mean flow for period of record 1966-84

		Disc	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
4070	2540	1800	1180	723	360	260	200	165	143	128	115	106	97	91	88	79



13012000 BUFFALO FORK NEAR MORAN, WYO.

LOCATION.--Lat 43°50'10", long 110°30'30", in sec.26, T.45 N., R.114 W., Teton County, on right bank 0.2 mi above bridge crossing, 0.50 mi upstream from mouth, 2.75 mi downstream from Lava Creek, and 4 mi southeast of Moran.

DRAINAGE AREA. -- 378 mi². Mean altitude, 8,850 ft.

PERIOD OF RECORD.--July to November 1906 (gage height only), July 1917 to September 1918 (no winter records), September 1944 to September 1960.

GAGE.--Water-stage recorder. Altitude of gage is 6,720 ft, from topographic map. July 31 to November 20, 1906, staff gage 300 ft upstream from mouth at different datum. July 9, 1917, to September 30,1918, staff gages at sites within 500 ft upstream from present site at different datums. June 1, 1958, to June 21, 1959, water-stage recorder 0.2 mi upstream at different datum.

REMARKS.--No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,960 ft³/s June 27, 1954, gage height, 6.71 ft; minimum, 78 ft³/s November 20; 1953, gage height, 0.88 ft, but may have been less during periods of ice effect.

Monthly and annual streamflow 1945-60

Magnitude and probability of annual low flow based on period of record 1946-60

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	329	169	225	47	0.21	3.1
November	236	144	182	27	0.15	2.5
December	194	120	153	21	0.14	2.1
January	164	114	136	15	0.11	1.9
February	160	107	133	15	0.11	1.9
March	154	116	136	11	0.08	1.9
April	608	160	274	112	0.41	3.8
May	1960	607	1280	456	0.36	17.9
June	3590	1590	2430	521	0.21	34.0
July	2490	462	1460	568	0.39	20.4
August	892	235	460	177	0.38	6.4
September	400	184	274	68	0.25	3.8
Annual	771	466	597	91	0.15	100

eriod (con-	1	recurren	é interv	3/s, for val, in y obability	ears, a	nd
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100
1	110	97	92	87		
3	117	105	99	94		
7	123	110	103	98		~
14	125	112	105	100		
30	127	115	109	104		~
60	129	118	112	108		
90	133	122	116	112		
120	138	127	121	117		~
183	159	145	138	134		~

Magnitude and probability of instantaneous peak flow based on 17 years of record

2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

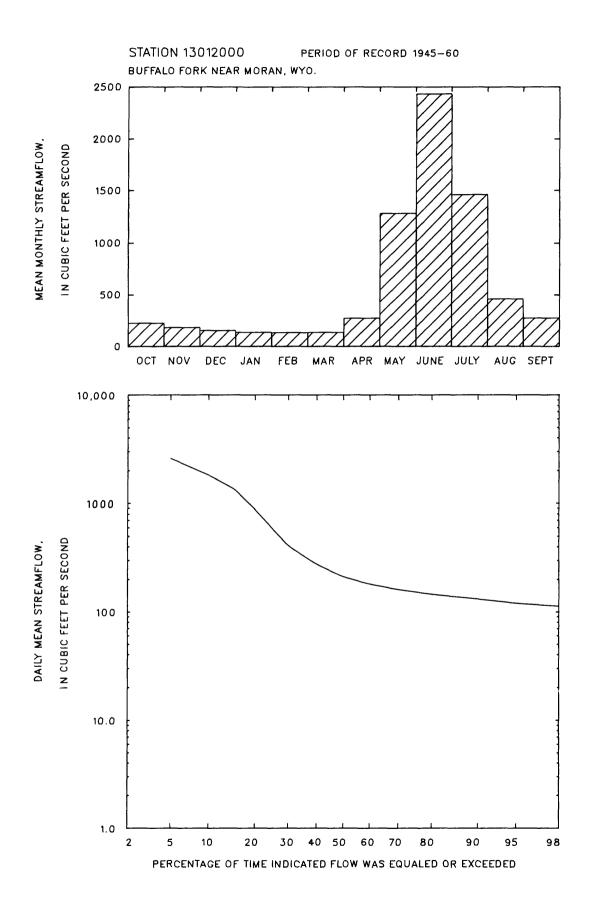
Weighted skew = 0.036

Magnitude and probability of annual high flow based on period of record 1945-60

Period (con-		recurren	ce inter	. ³ /s, for val, in bility,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3780	4410	4790	5230		
3	3660	4210	4510	4840		
7	3450	4000	4290	4600		
15	3140	3630	3910	4210		
30	2680	3110	3380	3710		
60	2130	2470	2690	2950		
90	1730	2010	2180	2380		

Duration of daily mean flow for period of record 1945-60

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3780	2580	1810	1340	878	407	272	210	178	159	144	131	119	112	108	102	94



13014500 GROS VENTRE RIVER AT KELLY, WYO.

LOCATION.--Lat 43°37'20", long 110°37'30", in NW2 sec.11, T.42 N., R.115 W., Teton County, on pier at former bridge site on private road, 0.3 mi south of Kelly Post Office and 3 mi downstream from Turpin Creek.

DRAINAGE AREA. -- 622 mi2.

PERIOD OF RECORD. -- June to September 1918, October 1944 to September 1958.

GAGE. -- Staff gage. Altitude of gage is 6,750 ft, from topographic map. June 16 to September 30, 1918, staff gage at site 1 mi upstream at different datum. October 1, 1944, to August 8, 1949, wire-weight gage on bridge at present site and datum. August 9, 1949, to June 25, 1953, staff gage 10 ft upstream at present datum. May 15 to July 23, 1954, May 22 to June 28, 1955, supplementary staff gage 300 ft downstream at datum 1.09 ft higher, and May 20, 1956, to July 10, 1958, supplementary staff gage at site 300 ft downstream at datum 0.61 ft lower.

REMARKS. -- Diversions above and below station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,220 ft³/s June 16, 1918, gage height, 9.95 ft, site and datum then in use; minimum, 101 ft³/s March 12, 1956, gage height, 0.27 ft.

EXTREMES OUTSIDE PERIOD OF RECORD--Flood of May 18, 1927, was considerably higher than flood of June 16, 1918, (landslide about 2 mi upstream washed out and released about 60,000 acre-ft of impounded water); discharge not determined.

Monthly and annual streamflow 1945-58

Magnitude and probability of annual low flow based on period of record 1946-58

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		recurren	e, in ft ce inter dance pr	val, in	years, a	nd
		,					tive days)	2 50%	5 [.] 20%	10 10%	20 5%	50 2%	100 1%
October	309	151	209	43	0.20	3.7							
November	228	146	181	25	0.14	3.2							
December	209	124	162	22	0.14	2.8	1	122	111	106	102		
January	185	132	151	15	0.10	2.7	3	127	116	111	108		
February	178	132	147	15	0.10	2.6	7	132	122	117	114		
March	172	132	147	12	0.08	2.6	14	137	127	122	119		
April	686	163	289	136	0.47	5.1	3 0	141	133	129	127		
May	1930	527	1300	451	0.35	22.8	60	144	135	131	129		
June	2820	887	1770	536	0.30	31.1	90	146	138	134	132		
July	1520	260	819	365	0.45	14.4	120	150	141	138	135		
August	608	165	297	122	0.41	5.2	183	164	151	146	143		
September	309	157	217	49	0.22	3.8					·····		
Annual	670	351	475	99	0.21	100							

Magnitude and probability of instantaneous peak flow based on 14 years of record

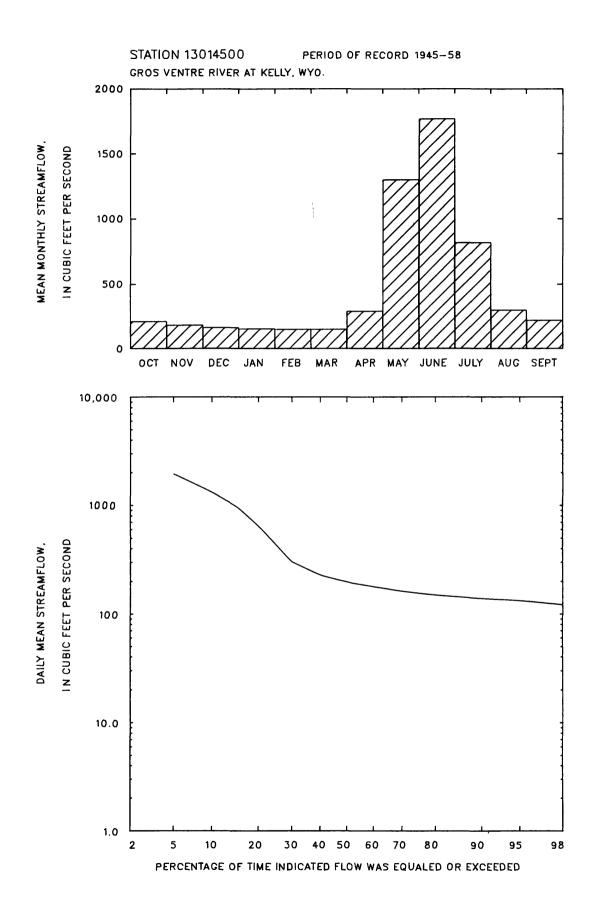
	e, in ft ³ , ars, and o				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
3220	4010	4530	5200	5710	6220

Magnitude and probability of annual high flow based on period of record 1945-58

Period (con-			ce inter	3/s, for val, in bility,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3170	3840	4260	4800		
3	2980	3620	4030	4550		
7	2760	3330	3700	4150		
15	2380	2950	3340	3860		
30	1940	2440	2810	3340		
60	1580	1950	2210	2560		
90	1280	1580	1780	2020		

Duration of daily mean flow for period of record 1945-58

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3130	1930	1310	955	645	301	226	196	177	161	148	137	132	121	115	111	104



13018300 CACHE CREEK NEAR JACKSON, WYO.

LOCATION.--Lat 43°27'08", long 110°42'12", in SW\sec.1, T.40 N., R.116 W., Teton County, Teton National Forest, on right bank 0.7 mi upstream from Salt Lick Draw, 2.4 mi southeast of Jackson, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--10.6 mi².

PERIOD OF RECORD .-- June 1962 to current year.

GAGE. -- Water-stage recorder. Altitude of gage is 6,750 ft, from topographic map.

REMARKS. -- No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 225 $\rm ft^3/s$, June 24, 1971, gage height, 3.90 ft; maximum gage height, 3.97 ft, June 7, 1972; minimum daily discharge, 2.1 $\rm ft^3/s$, January 1, 1978.

Monthly and annual streamflow 1963-84

Magnitude and probability of annual low flow based on period of record 1964-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	e, in ft ce inter dance pro	val, in	years, a	nd
	(10 /0)		(10 / 5)	(10 / 0)			tive days)	2 5 0%	5 20%	10 10%	20 5%	50 2%	100 1%
October	9.4	4.1	7.0	1.3	0.18	4.3							
November	7.2	3.1	5.8	0.87	0.15	3.5							
December	6.6	2.7	5.2	0.95	0.18	3.2	1	3.3	2.8	2.5	2.3		
January	5.9	2.4	4.6	0.78	0.17	2.8	3	3.3	2.9	2.6	2.4		
February	6.1	3.2	4.2	0.72	0.17	2.6	7	3.5	3.0	2.8	2.5		
March	7.3	3.1	4.2	0.90	0.22	2.5	14	3.6	3.1	2.8	2.6		
April	9.9	3.6	5.8	1.7	0.30	3.5	30	3.8	3.3	3.0	2.8		
May	47	5.9	25	9.5	0.37	15.5	60	4.1	3.4	3.2	2.9		
June	103	12	54	22	0.41	32.7	90	4.2	3. 6	3.3	3.1		
July	42	6.5	27	10	0.39	16.3	120	4.5	3.9	3.6	3.3		
August	19	5.3	13	3.5	0.27	7.8	183	5.3	4.5	4.1	3.7		
September	12	4.8	8.7	1.8	0.21	5.3							
Annual	20	5.7	14	3.3	0.24	100							

Magnitude and probability of instantaneous peak flow based on 40 years of record

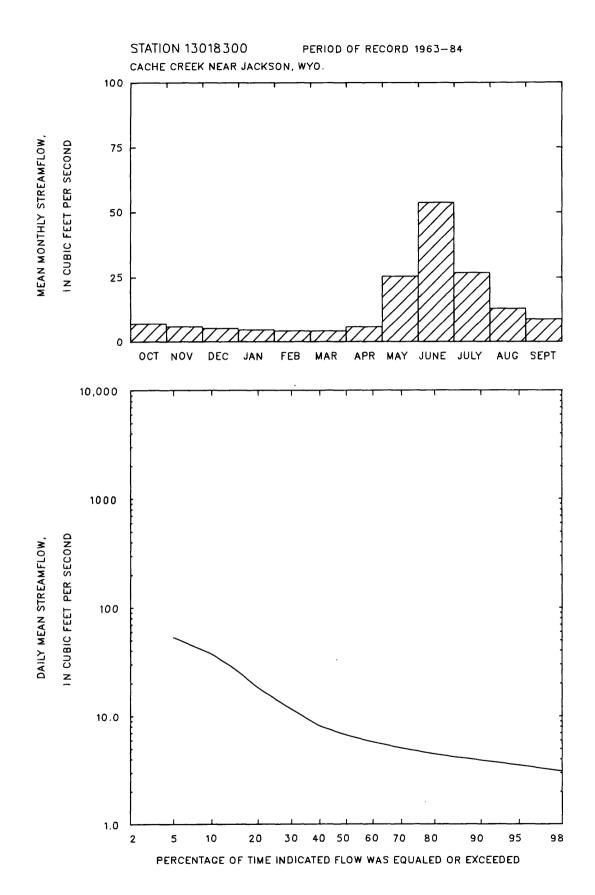
	ge, in ft ³ ears, and				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
80	117	140	168	188	207

Magnitude and probability of annual high flow based on period of record 1963-84

Period (con-		recurren	ice inter	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 5 0 %	5 20%	10 10%	25 4%	50 2%	100 1%
1	79	110	126	142		
3	75	103	117	130		
7	70	96	109	121		
15	65	88	99	108		
30	60	76	82	86		
60	48	59	62	64		
90	38	47	50	51		

Duration of daily mean flow for period of record 1963-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
84	53	37	26	18	11	8.0	6.6	5.7	5.0	4.4	3.9	3.5	3.1	2.8	2.7	2.3



13019500 HOBACK RIVER NEAR JACKSON, WYO.

LOCATION.--Lat 43°17'55", long 110°40'10", in sec.32, T.39 N., R.115 W., Teton County, on right bank at Camp Creek, 0.25 mi downstream from Willow Creek, 4 mi upstream from mouth, and 13.5 mi southeast of Jackson.

DRAINAGE AREA. -- 564 mi2.

PERIOD OF RECORD. --July 1917 to September 1918 (published as "near Cheney"), October 1944 to September 1958. Monthly discharge only for some periods; published in WSP 1317.

GAGE.--Staff gage. Altitude of gage is 6,040 ft, from topographic map. July 9, 1917, to September 30, 1918, at site 3.75 mi downstream at different datum. November 6, 1944, to May 29, 1956, at site 300 ft upstream at datum 0.92 ft higher.

REMARKS. -- Small diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 6,160 ft3/s June 16, 1918, gage height, 13.46 ft, site and datum then in use; minimum, 90 ft³/s December 18, 1946, gage height, 1.70 ft, site and datum then in use.

Monthly and annual streamflow 1945-58

Magnitude and probability of annual low flow based on period of record 1946-58

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		recurren	ce inter	³ /s, for val, in y	years, a	nd
	(2- /-)						tive days)	2 5 0%	5 20%	10 10%	20 5%	50 2%	100 1%
October	368	211	273	43	0.16	3.2							
November	307	192	230	30	0.13	2.7							
December	259	158	209	26	0.12	2.5	1	151	130	116	103		
January	232	170	197	20	0.10	2.3	3	154	144	140	137		
February	229	164	190	18	0.09	2.2	7	164	154	149	145		~
March	223	156	189	21	0.11	2.2	14	172	16 0	154	150		
April	1490	254	686	397	0.58	8.1	30	179	167	160	155		
May	3400	1060	2140	678	0.32	25.3	60	185	173	167	163		
June	3360	1720	2330	562	0.24	27.5	90	191	179	173	169		
July	2110	468	1200	464	0.39	14.2	120	196	183	177	173		
August	845	281	497	146	0.29	5.9	183	215	200	194	190		
September	432	210	314	65	0.21	3.7							
Annual	985	496	7 0 6	154	0.22	100							

Magnitude and probability of instantaneous peak flow based on 14 years of record

		/s, for in exceedance			
2	5	10	25	50	100
50%	20%	10%	4%	2 %	1%
3790	4800	5400	6110	6600	7070

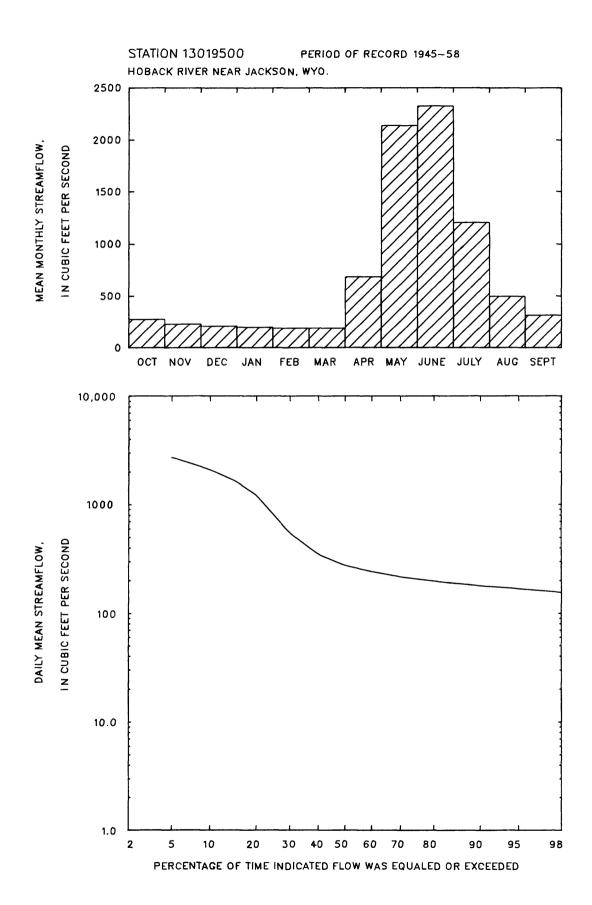
Weighted skew = -0.166

Magnitude and probability of annual high flow based on period of record 1945-58

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3710	4720	5350	6140		
3	3530	4390	4900	5500		
7	3370	4120	4580	5110		
15	3040	3740	4180	4710		
30	2630	3220	3600	4070		
60	2270	2770	3080	3460		
90	1910	2340	2620	2960		

Duration of daily mean flow for period of record 1945-58

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3890	2710	2090	162 0	1210	542	346	273	239	214	195	177	166	154	149	139	132



13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WYO.

LOCATION.--Lat 43°11'47", long 110°53'18", Lincoln County, on right bank 0.3 mi downstream from Wolf Creek, 6.4 mi upstream from Greys River, 7.4 mi east of Alpine, 16.1 mi upstream from Palisades Dam, and at mile 917.5.

DRAINAGE AREA. -- 3,465 mi2.

PERIOD OF RECORD. -- March 1937 to March 1939 (published as "above Greys River, near Alpine"), July 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,683.90 ft. March 16,1937 to March 31, 1939, at site 6.0 mi downstream at different datum.

REMARKS .-- Flow partly regulated by Jackson Lake. Some diversions from tributaries above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge, 28,600 ft3/s, June 19, 1974, gage height, 11.96 ft; minimum, 740 ft3/s, November 16, 1955, gage height, 2.19 ft.

Monthly and annual streamflow 1938, 1954-84

Magnitude and probability of annual low flow based on period of record 1938, 1955-84

	Maximum	Minimum	Mean	Stan- dard devia- tion	Coeffi- cient of vari-	Percent of annual	Period (con-	r	ecurrenc	e, in ft ³ e interv lance pro	al, in y	ears, an	ıd
Month	(ft ³ /s)	(ft ³ /s)	(ft ³ /s)	(ft ³ /s)	ation	runoff	secu-	2	5	10	20	50	100
							days)	50%	20%	10%	5%	2%	1%
October	3610	1330	2150	541	0.25	3.9							
November	4240	1230	1860	612	0.33	3.4							
December	5800	1150	1730	807	0.47	3.1	1	1220	1040	963	903	842	
January	2230	1070	1500	291	0.19	2.7	3	1240	1070	997	940	881	
February	3380	1070	1620	492	0.30	2.9	7	1280	1110	1030	974	915	
March	3390	1100	1790	644	0.36	3.2	14	1320	1140	1060	1000	942	
April	6530	1510	3240	1500	0.46	5.8	30	1370	1190	1110	1050	987	
May	15400	3000	9030	3180	0.35	16.3	60	1420	1240	1160	1090	1030	
June	21900	7360	13800	3640	0.26	24.8	90	1480	1290	1210	1140	1070	
July	15800	4610	9260	2900	0.31	16.7	120	1530	1320	1230	1170	1100	
August	7540	2490	5540	1320	0.24	10.0	183	1720	1470	1360	1280	1200	
September	7600	2240	4060	1170	0.29	7.3							
Annual	6590	2730	4640	931	0.20	100							

Magnitude and probability of instantaneous peak flow based on 31 years of record

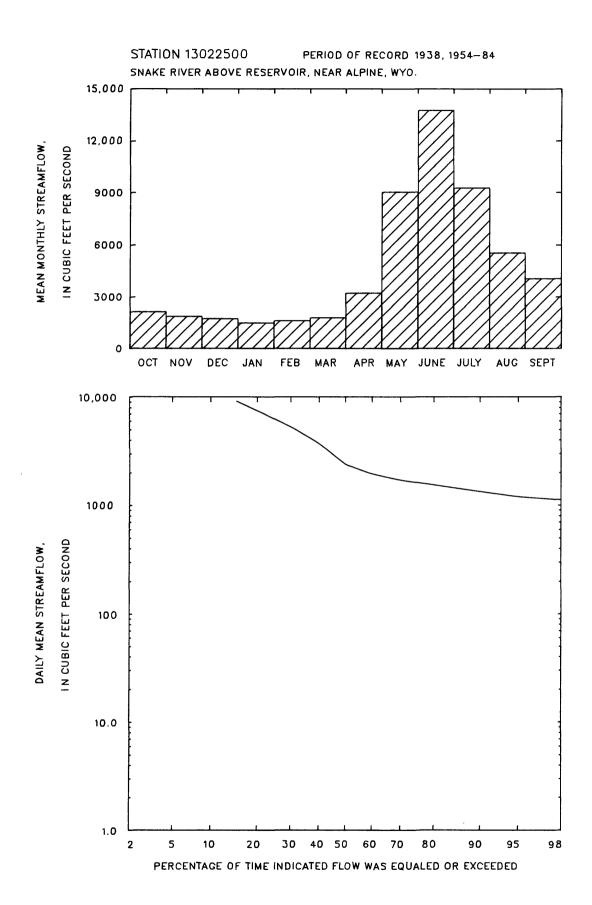
		/s, for i			e interval percent
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
19200	23600	26100	28700	30400	32000

Magnitude and probability of annual high flow based on period of record 1938, 1954-84

Period (con-		recurre	nce inter	rval, in	r indicat years, a in perce	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	19100	23000	25000	27100	28500	
3	18400	22200	24200	26300	27600	
7	17300	20900	22900	25000	26400	
15	16000	19400	21300	23300	24600	
30	14500	17700	19400	21300	22600	
60	12600	15300	16700	18300	19200	
90	10800	13200	14500	15900	16900	

Duration of daily mean flow for period of record 1938, 1954-84

		Dis	charge,	in ft ³	s, whi	ch was	equaled	or exc	eeded fo	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
20000	14800	11600	9070	7440	5290	3720	2380	1940	1690	1530	1330	1190	1120	1070	1030	967



13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WYO.

LOCATION.--Lat 43°08'35", long 110°58'34", in SW\sE\sec.34, T.37 N., R.118 W., (unsurveyed), Lincoln County, on right bank at Bridge Campground, 3.0 mi upstream from maximum flowline of Palisades Reservoir, and 3.6 mi southeast of Alpine.

DRAINAGE AREA. -- 448 mi².

PERIOD OF RECORD. -- July to September 1917, June to September 1918, March 1937 to March 1939, October 1953 to current year. Published as Greys River near Alpine, Idaho, 1917-18 and as Greys River near Alpine, Wyo., 1937-39.

GAGE.--Water-stage recorder. Altitude of gage is 5,720 ft, from topographic map. July 6 to September 30, 1917, and June 4 to September 30, 1918, non-recording gage and March 17, 1937, to March 31, 1939, water-stage recorder, at site 1.8 mi downstream, and October 1953 to September 22, 1965, water-stage recorder at site 1 mi downstream at different datums.

REMARKS. -- Less than 500 acres irrigated by diversions from Greys River and tributaries above station.

EXTREMES FOR PERIOD OF RECORD. -- Maximum discharge observed, 7,230 ft3/s, June 19, 1971, gage height, 6.33 ft; maximum gage height observed, 19.1 ft, former site and datum, about December 18, 1965 (ice jam); minimum daily discharge, 92 ft³/s, January 2, 1978.

Monthly and annual streamflow 1938, 1954-84

Magnitude and probability of annual low flow based on period of record 1938-39, 1955-84

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con- secu-		recurren	ce inter	val, in	indicato years, a y, in pe	nd
		(10 /8)	(10 /8)	(10-/5)	acton		tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	472	194	321	66	0.21	4.0							
November	455	175	273	55	0.20	3.4							
December	366	164	242	47	0.19	3.0	1	165	138	124	111	98	
January	315	159	219	41	0.19	2.7	3	170	146	132	122	110	
February	293	152	211	36	0.17	2.6	7	176	156	145	136	127	
March	348	173	223	42	0.19	2.8	14	184	162	152	144	136	
April	1320	238	588	278	0.47	7.4	30	191	170	161	154	147	
May	2840	333	1830	552	0.30	23.0	60	199	178	169	162	156	
June	4000	387	2150	794	0.37	27.0	90	207	185	175	168	161	
July	1900	228	1020	436	0.43	12.8	120	215	192	182	175	167	
August	809	205	501	146	0.29	6.3	183	244	215	202	192	182	
September	559	198	380	87	0.23	4.8							
Annual	1020	259	664	167	0.25	100							

Magnitude and probability of instantaneous peak flow based on 34 years of record

Discharge, in ft3/s, for indicated recurrence interval in years, and exceedance probability, in percent 100 10 25 50 20% 50% 10% 4% 2% 1% 3410 4450 5100 5880 6440 6990

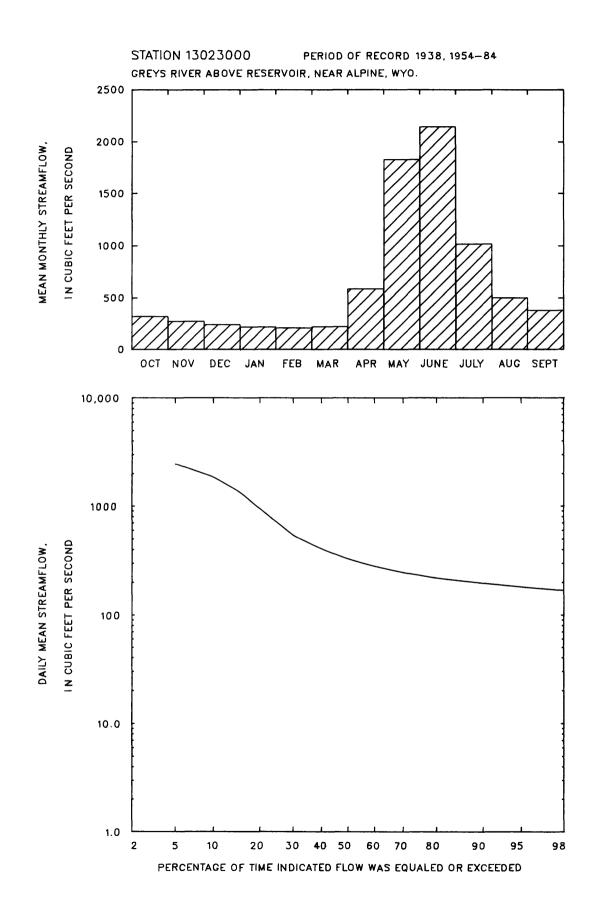
Weighted skew = -0.096

Magnitude and probability of annual high flow based on period of record 1938, 1954-84

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	\mathbf{n} d
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	3400	4220	4490	4670	4740	
3	3270	4020	4250	4390	4450	
7	3060	3760	3970	4110	4160	
15	2860	3470	3640	3740	3770	
30	2630	3120	3240	3290	3310	
60	2210	2650	2760	2820	2840	
90	1830	222 0	2340	2410	2430	

Duration of daily mean flow for period of record 1938, 1954-84

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded	for indi	cated p	ercenta	ge of	time		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3490	2450	1860	1360	947	536	403	324	278	244	217	194	179	166	154	142	122



13024000 SALT RIVER NEAR SMOOT, WYO.

LOCATION.--Lat 42°36'20", long 110°55'10", in sec.7, T.30 N., R.118 W., Lincoln County, on left bank 1.25 mi south of Smoot, 1.5 mi upstream from Willow Creek, and 4 mi upstream from Cottonwood Creek.

DRAINAGE AREA. -- 47.8 mi².

PERIOD OF RECORD. -- June 1932 to September 1957. Monthly discharge only for some periods; published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft, from topographic map. Prior to April 11, 1934, chain gage and April 11 to September 30, 1934, water-stage recorder, at same site at datum 1.00 ft higher.

REMARKS. -- Diversions for irrigation of about 4,000 acres, adjudicated by Wyoming for diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 460 ft³/s June 7, 1957, gage height, 3.83 ft; no flow January 25-28, 1949.

Monthly and annual streamflow 1933-57

Magnitude and probability of annual low flow based on period of record 1934-57

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff	Period (con-		recurren	cé inter	val, in	indicato years, an y, in pe	nd
	(10 /8)	(10 /8)	(10 /8)	(10 /8)	acton		tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	19	3.8	10	3.2	0.32	2.3							
November	13	3.4	8.7	2.5	0.28	2.0							
December	13	3.0	7.4	2.4	0.33	1.7	1	4.3	2.7	1.5	0.0		
January	14	1.5	6.8	3.1	0.46	1.6	3	4.5	2.9	1.8	0.0		
February	13	2.5	6.8	2.9	0.43	1.6	7	4.9	3.0	1.9	0.8		
March	15	4.0	8.2	2.8	0.34	1.9	14	5.6	3.2	2.1	1.3		
April	99	8.3	41	25	0.62	9.5	30	5.6	3.5	2.6	1.9		
May	279	38	141	57	0.41	32.5	60	5.8	3.9	3.0	2.4		
June	248	18	131	57	0.43	30.1	90	6.1	4.3	3.6	3.0		
July	106	9.7	45	24	0.54	10.4	120	6.4	4.8	4.1	3.6		
August	28	4.7	17	5.9	0.35	3.9	183	7.7	5.8	4.9	4.2		
September	19	2.8	11	3.6	0.32	2.6							
Annual	56	11	36	12	0.33	100							

Magnitude and probability of instantaneous peak flow based on --- years of record

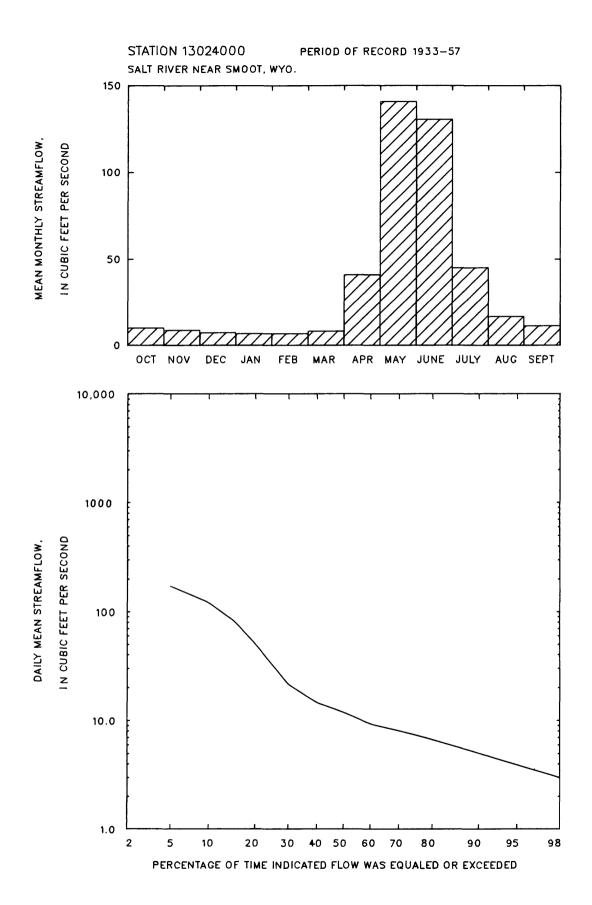
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1933-57

Period (con-		recurre	nce inte	t ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100
1	242	323	356	383		
3	235	312	343	368		
7	222	295	326	351		
15	202	266	292	313		
30	176	229	251	268		
60	143	189	208	224		
90	115	152	168	182		

Duration of daily mean flow for period of record 1933-57

		Dis	charge,	in ft ³	/s, whi	ch was	equaled	or exc	eeded f	or indi	cated p	ercenta	ge of t	ime		
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
276	171	121	82	51	21	14	12	9.3	8.0	6.7	5.0	3.9	3.0	2.4	2.0	0.58



13024500 COTTONWOOD CREEK NEAR SMOOT, WYO.

LOCATION.--Lat 42°36'40", long 110°53'30", in sec.4, T.30 N., R.118 W., Lincoln County, right bank 0.3 mi upstream from headgate of highest diversion, 1.25 mi downstream from Porcupine Creek, 1.5 mi southeast of Smoot, and 4.5 mi upstream from mouth.

DRAINAGE AREA. -- 26.3 mi².

PERIOD OF RECORD. -- October 1932 to September 1957.

GAGE.--Water-stage recorder. Altitude of gage is 6,750 ft, from topographic map. Prior to April 8, 1934, staff gage at site 0.3 mi downstream at different datum.

REMARKS .-- No diversion above station. Flow regulated by Cottonwood Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 438 ft³/s June 2, 1956, gage height, 3.31 ft; maximum gage height, 4.12 ft June 10, 1957 (backwater from debris); minimum discharge, 6.4 ft³/s March 11, 1948; minimum gage height, 0.95 ft January 19, 1950.

Monthly and annual streamflow 1933-57

Magnitude and probability of annual low flow based on period of record 1934-57

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	Coeffi- cient of vari- ation	Percent of annual runoff
October	35	14	23	4.4	0.19	4.4
November	26	12	19	3.2	0.17	3.6
December	24	12	17	2.6	0.15	3.2
January	23	10	15	2.6	0.17	2.8
February	20	9.9	14	2.4	0.18	2.6
March	17	8.7	13	2.1	0.16	2.4
April	53	11	24	9.6	0.40	4.6
May	145	34	84	33	0.39	15.8
June	225	44	160	48	0.30	30.1
July	160	34	88	34	0.39	16.6
August	67	21	45	11	0.24	8.5
September	44	16	29	6.5	0.22	5.5
Annual	62	24	44	9.5	0.21	100

Period (con-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent										
secu- tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%					
1	11	9.5	8.7	8.0							
3	11	9.7	8.8	8.2							
7	11	9.8	9.0	8.3							
14	12	10	9.3	8.7							
30	12	11	9.9	9.2							
60	13	11	11	10							
90	14	12	11	11							
120	14	13	12	11							
183	17	15	14	13							

Magnitude and probability of instantaneous peak flow based on --- years of record

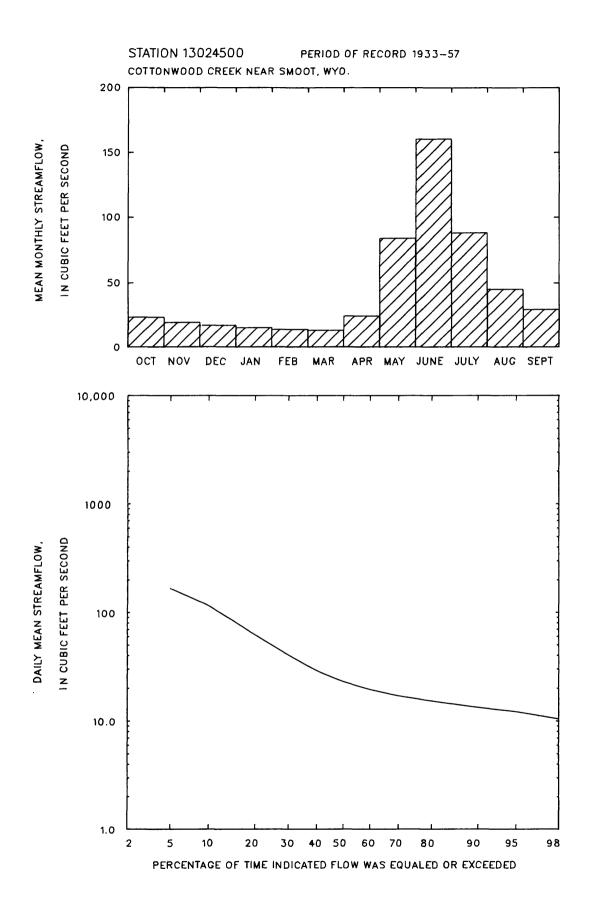
		/s, for in			
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1933-57

Period (con-		recurre	nce inte	ft ³ /s, for rval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	238	303	331	355		
3	229	291	318	342		
7	217	276	303	327		
15	199	250	273	293		
30	176	217	233	247		
60	143	174	186	196		
90	116	141	152	162		

Duration of daily mean flow for period of record 1933-57

		Discharge, in $\mathrm{ft^3/s}$, which was equaled or exceeded for indicated percentage of time														
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
245	166	115	82	62	40	29	23	19	17	15	13	12	10	9.5	8.9	8.3



13025000 SWIFT CREEK NEAR AFTON, WYO.

LOCATION.--Lat 42°43'30", long 110°54'00", in SE½ sec.29, T.32 N., R.118 W., Lincoln County, Bridger National Forest, on right bank 1.0 mi upstream from mouth of canyon, 1.5 mi east of Afton, and 4.5 mi upstream from mouth.

DRAINAGE AREA. -- 27.4 mi².

PERIOD OF RECORD.--October 1942 to September 1980. No winter records since 1971. Monthly discharge only for some periods; published in WSP 1317.

GAGE. -- Water-stage recorder. Altitude of gage is 6,420 ft, from topographic map.

REMARKS.--Small powerplant and reservoir, adjudication, 48.45 acre-ft/yr, 0.2 mi upstream. Pipeline, adjudication, 2.5 ft³/s, diverts water above station for town of Afton. No diversion for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 793 ft³/s July 6, 1975, gage height, 3.78 ft; minimum daily, 20 ft³/s December 30, 1958.

COOPERATION .-- Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

Monthly and annual streamflow 1943-71

Magnitude and probability of annual low flow based on period of record 1944-71

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft ³ /s)	Stan- dard devia- tion (ft ³ /s)	cient of vari-	Percent of annual runoff	Period (con-		recurren	e, in ft ³ ce interv dance pro	al, in y	ears, a	nd
			(10 /5)	(IL /S)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
October	64	39	50	6.0	0.12	4.8							
November	55	3 3	44	5.4	0.12	4.2							
December	51	30	40	4.9	0.12	3.8	1	30	27	25	23	21	
January	54	28	38	5.4	0.14	3.6	3	30	28	26	25	24	
February	43	28	35	3.8	0.11	3.4	7	31	29	27	26	25	
March	46	29	35	3.6	0.10	3.3	14	32	29	28	27	26	
April	77	29	44	10	0.24	4.2	30	33	30	29	28	27	
May	240	62	131	47	0.36	12.6	60	34	32	30	29	28	
June	461	189	294	60	0.20	28.2	90	36	32	31	30	28	
July	359	73	188	67	0.36	18.1	120	37	34	32	31	30	
August	140	45	84	20	0.24	8.0	183	40	37	35	34	33	
September	88	38	59	9.9	0.17	5.7							
Annual	122	63	87	13	0.15	100							

Magnitude and probability of instantaneous peak flow based on 38 years of record

	e, in ft ³ ars, and				e interval percent
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
504	623	695	782	843	902

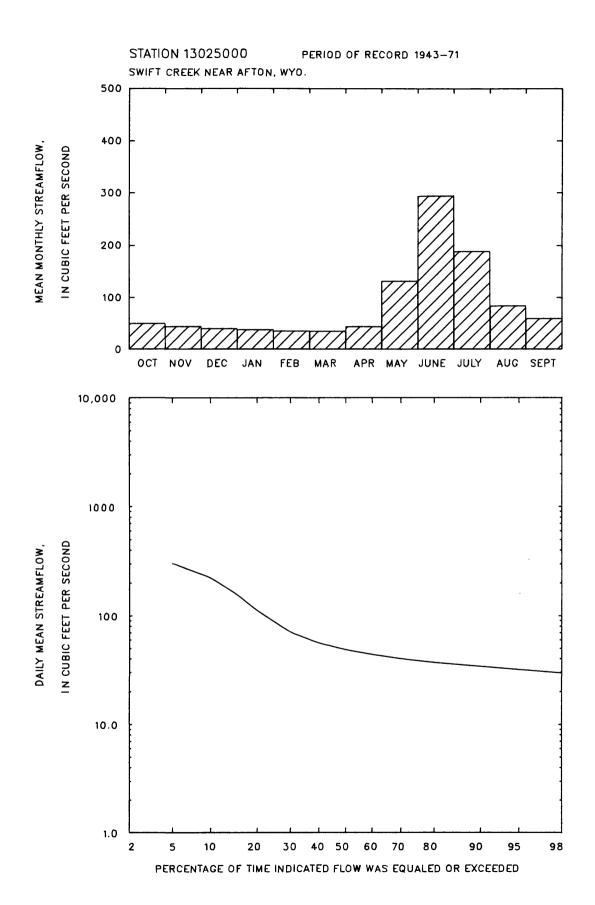
Weighted skew = -0.020

Magnitude and probability of annual high flow based on period of record 1943-71

Period (con-		recurre	nce inter	rval, in	or indica years, a in perce	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	443	540	600	673	726	
3	423	515	• 572	641	690	
7	396	481	535	601	648	
15	358	431	474	525	561	
30	315	372	406	446	474	
60	254	302	331	365	389	
90	207	246	269	295	313	

Duration of daily mean flow for period of record 1943-71

		Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time														
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
442	301	223	157	111	70	56	48	44	40	37	34	32	29	28	28	23



13027000 STRAWBERRY CREEK NEAR BEDFORD, WYO.

LOCATION.--Lat 42°54'10", long 110°54'00", in sec.27 T.34 N., R.118 W., Lincoln County, on right bank at mouth of canyon, 300 ft upstream from Strawberry Canal headgate, 1.5 mi east of Bedford, and 5.5 mi upstream from mouth.

DRAINAGE AREA.--21.3 mi².

PERIOD OF RECORD.--June 1932 to September 1943.

GAGE.--Water-stage recorder. Altitude of gage is 6,420 ft, from topographic map. Prior to April 9, 1934, staff gage 200 ft downstream at different datum.

REMARKS. -- One small diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 396 ft³/s June 27, 1943, gage height, 4.51 ft, from rating curve extended above 250 ft³/s, but may have been higher during period of no gage-height record June 19-26, 1943; minimum not determined.

Monthly and annual streamflow 1933-43

Magnitude and	probability of	annual low	flow
based on	period of reco	rd 1934-43	

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	cient of vari-	Percent of annual runoff	Period (con-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent						
	(10 / 5)		(10 / 5)				tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%	
October	53	35	46	5.0	0.11	6.1								
November	48	34	41	3.9	0.09	5.5								
December	43	31	37	3.9	0.11	4.9	1	27	25	24	24			
January	37	28	33	2.7	0.08	4.5	3	27	26	25	24			
February	35	28	32	2.3	0.07	4.2	7	28	26	25	24			
March	35	2 5	30	2.8	0.09	4.0	14	28	26	25	24			
April	62	29	43	11	0.25	5.8	30	30	27	26	25			
May	150	52	105	29	0.28	14.1	60	31	29	28	27			
June	236	74	159	52	0.33	21.3	90	32	30	29	28			
July	187	56	96	36	0.37	12.9	120	34	32	30	29			
August	110	44	69	17	0.25	9.3	183	37	35	33	32			
September	81	37	55	11	0.20	7.4								
Annual	86	47	62	11	0.17	100								

Magnitude and probability of instantaneous peak flow based on 12 years of record

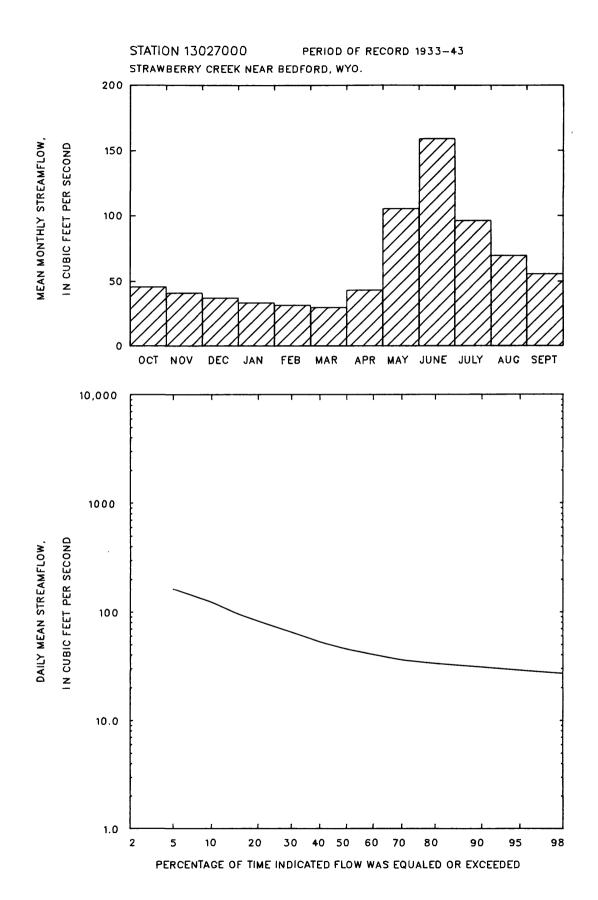
	ge, in ft ³ ears, and				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
262	320	354	393	420	445

Magnitude and probability of annual high flow based on period of record 1933-43

Period (con-		recurre	nce inte	c ³ /s, for eval, in ability,	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	1 0 0
1	240	307	339			
3	231	294	325			~
7	211	274	3 0 9			
15	187	241	272			
3 0	168	216	243			
60	139	175	198			
90	118	148	167			

Duration of daily mean flow for period of record 1933-43

Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
249	162	123	96	82	65	52	45	40	36	33	30	29	27	26	25	24



13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WYO.

LOCATION.--Lat 43°04'47", long 111°02'12", in SW\2NE\3 sec.28, T.36 N., R.119 W., Lincoln County, on right bank 3.4 mi northwest of Etna and 8.0 mi upstream from maximum flowline of Palisades Reservoir.

DRAINAGE AREA. -- 829 mi2.

PERIOD OF RECORD. -- October 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,675.78 ft, from levels by U.S. Bureau of Reclamation.

REMARKS.--Diversions above station for power developments, industry, municipal supply, and irrigation of about 60,500 acres, of which about 1,000 acres are below station (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,910 ft³/s, May 30, 1983, gage height, 5.96 ft; minimum, 160 ft³/s, January 7, 8, 1971, gage height, 1.53 ft.

Monthly and annual streamflow 1954-84

Magnitude	and	probabi	lity	of	ann	ual	low	flow
base	ed or	period	of	reco	ord	1955	5-84	

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	cient of vari- ation	Percent of annual runoff	Period (con- secu-		Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent							
	(10 / 5)		(10 / 0)	(10 / 0)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%			
October	912	336	638	127	0.20	6.6										
November	838	347	605	100	0.17	6.3										
December	712	381	533	84	0.16	5.5	1	371	304	266	234	198				
January	583	324	461	67	0.15	4.8	3	379	315	278	247	213				
February	702	337	448	71	0.16	4.7	7	387	332	301	276	247				
March `	806	368	465	84	0.18	4.8	14	403	350	320	295	266				
April	1560	503	929	319	0.34	9.6	30	423	370	338	311	279				
May	3250	306	1800	790	0.44	18.6	60	439	383	351	323	290				
June	3360	275	1510	848	0.56	15.6	90	456	395	361	331	298				
July	1810	271	915	433	0.47	9.5	120	479	414	377	346	311				
August	997	266	665	187	0.28	6.9	183	532	455	412	376	335				
September	961	342	678	153	0.23	7.0					-					
Annua1	1250	432	805	222	0.28	100										

Magnitude and probability of instantaneous peak flow based on 29 years of record

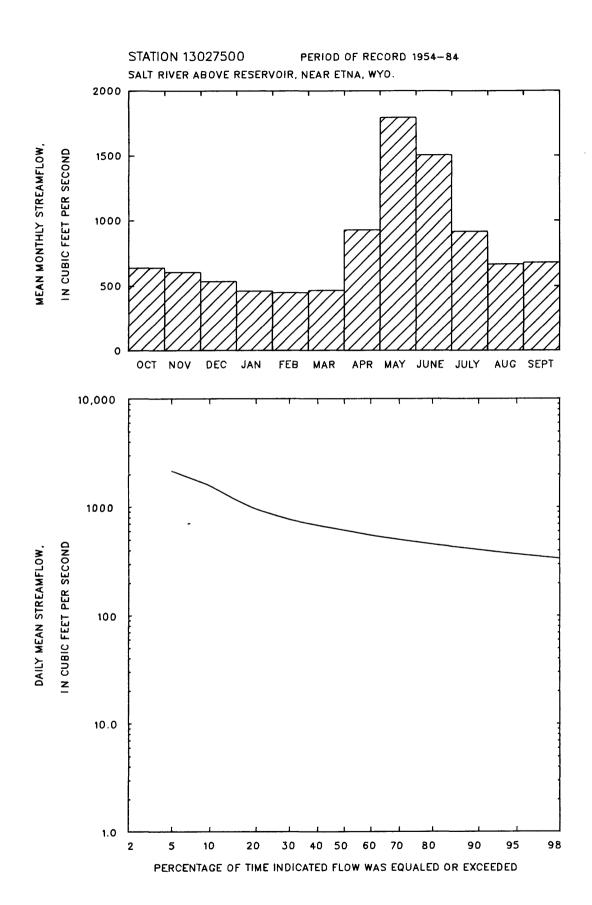
	e, in ft ³ , ars, and o				
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%
2380	3410	4070	4850	5410	5940

Magnitude and probability of annual high flow based on period of record 1954-84

Period (con-		Discharg recurren exceedan	ce inter	val, in	years, a	nd
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100
1	2270	3260	3880	4620	5150	
3	2210	3180	3790	4510	5020	
7	2120	3070	3660	4360	4840	
15	2010	2920	3480	4150	4610	
30	1870	2710	3240	3860	4290	
60	1620	235 0	2820	3400	3810	
90	1400	2020	2430	2930	33 0 0	

Duration of daily mean flow for period of record 1954-84

Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time																
1%	5 %	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
3320	2150	1580	1160	947	761	671	607	546	499	454	403	367	334	303	261	228



13028500 SALT RIVER AT WYOMING-IDAHO STATE LINE

LOCATION.--Lat 43°09'50", long 111°03'50", in sec.16, T.3 S., R.46 E., Bonneville County, Idaho, on left bank 350 ft upstream from highway bridge, 400 ft downstream Trout Creek, 0.5 mi upstream from mouth, and 0.75 mi west of Wyoming-Idaho State line.

DRAINAGE AREA. -- 890 mi2.

PERIOD OF RECORD. --October 1933 to September 1955. Monthly discharge only for some periods; published in WSP 1317. GAGE. -- Water-stage recorder. Altitude of gage is 5,580 ft, from topographic map.

REMARKS.--Some diurnal fluctuation at low flow caused by many small powerplants on tributaries. Diversions for irrigation of about 66,000 acres, for industry and power and for domestic and municipal supply adjudicated by Wyoming for diversion above station. Two small reservoirs above station in Wyoming for power and fish culture.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,520 ft³/s May 6, 1936, gage height, 4.64 ft; minimum, 217 ft³/s May 17, 1934, gage height, 1.30 ft; minimum daily, 220 ft³/s May 17, 1934.

Monthly and annual streamflow 1934-55

Magnitude and probability of annual low flow based on period of record 1935-55

Month	Maximum (ft ³ /s)	Minimum (ft ³ /s)	Mean (ft³/s)	Stan- dard devia- tion (ft ³ /s)	cient of vari-	Percent of annual runoff	Period (con-	Discharge, in ft ³ /s, for indicated recurrence interval, in years, and non-exceedance probability, in percent						
	(20 /0)	(10 / 0)	(10 / 5)	(10 / 0)			tive days)	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%	
October	789	335	597	105	0.18	7.1								
November	759	339	574	91	0.16	6.8								
December	635	326	505	72	0.14	6.0	1	379	331	299	270			
January	528	310	445	61	0.14	5.3	3	384	337	304	274			
February	512	297	409	50	0.12	4.9	7	389	342	309	279			
March	495	318	415	50	0.12	4.9	14	397	350	315	283			
April	1930	451	1030	413	0.40	12.2	30	403	356	324	295			
May	2640	273	1410	607	0.43	16.7	60	416	367	336	309			
June	2060	290	1060	419	0.40	12.6	90	434	382	348	318			
July	1210	269	737	228	0.31	8.8	120	459	400	361	327			
August	969	267	639	176	0.27	7.6	183	510	439	393	352			
September	850	273	603	137	0.23	7.2								
Annua1	990	358	702	164	0.23	100								

Magnitude and probability of instantaneous peak flow based on --- years of record

		/s, for in			
2	5	10	25	50	100
50%	20%	10%	4%	2%	1%

Magnitude and probability of annual high flow based on period of record 1934-55

Period (con-		Discharg recurren exceedan	cé inter	val, in	years, a	and
secu- tive days)	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	1810	2550	2970	3420		
3	1770	2480	2890	3330		
7	1710	2400	2800	3230		
15	1620	2290	2690	3150		
30	1500	2110	2490	2930		
60	1330	1830	2120	2450		
90	1170	1580	1820	2090		

Duration of daily mean flow for period of record 1934-55

Discharge, in ft ³ /s, which was equaled or exceeded for indicated percentage of time																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
2530	1620	1240	1000	856	704	626	571	519	471	427	382	342	301	273	257	230

